Ontario

Ontario Geological Survey
Open File Report 6104

Eagle Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario

2005

Ontario

ONTARIO GEOLOGICAL SURVEY

Open File Report 6104

Eagle Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario

by

V.E. Felix

2005

Parts of this publication may be quoted if credit is given. It is recommended that reference to this publication be made in the following form:

Felix, V.E. 2005. Eagle Lake area high-density regional lake sediment and water geochemical survey, northwestern Ontario; Ontario Geological Survey, Open File Report 6104, 79p.

© Queen's Printer for Ontario, 2005

© Queen's Printer for Ontario, 2005.

Open File Reports of the Ontario Geological Survey are available for viewing at the Mines Library in Sudbury, at the Mines and Minerals Information Centre in Toronto, and at the regional Mines and Minerals office whose district includes the area covered by the report (see below).

Copies can be purchased at Publication Sales and the office whose district includes the area covered by the report. Although a particular report may not be in stock at locations other than the Publication Sales office in Sudbury, they can generally be obtained within 3 working days. All telephone, fax, mail and e-mail orders should be directed to the Publication Sales office in Sudbury. Use of VISA or MasterCard ensures the fastest possible service. Cheques or money orders should be made payable to the *Minister of Finance*.

Mines and Minerals Information Centre (MMIC) Macdonald Block, Room M2-17 900 Bay St. Toronto, Ontario M7A 1C3	Tel:	(416) 314-3800
Mines Library 933 Ramsey Lake Road, Level A3 Sudbury, Ontario P3E 6B5	Tel:	(705) 670-5615
Publication Sales 933 Ramsey Lake Rd., Level A3 Sudbury, Ontario P3E 6B5	Tel: Fax: E-mail:	(705) 670-5691(local) 1-888-415-9845(toll-free) (705) 670-5770 pubsales@ndm.gov.on.ca

Regional Mines and Minerals Offices:

Kenora - Suite 104, 810 Robertson St., Kenora P9N 4J2

Kirkland Lake - 10 Government Rd. E., Kirkland Lake P2N 1A8

Red Lake - Box 324, Ontario Government Building, Red Lake P0V 2M0

Sault Ste. Marie - 70 Foster Dr., Ste. 200, Sault Ste. Marie P6A 6V8

Southern Ontario - P.O. Bag Service 43, 126 Old Troy Rd., Tweed K0K 3J0

Sudbury - Level B3, 933 Ramsey Lake Rd., Sudbury P3E 6B5

Thunder Bay - Suite B002, 435 James St. S., Thunder Bay P7E 6S7

Timmins - Ontario Government Complex, P.O. Bag 3060, Hwy. 101 East, South Porcupine P0N 1H0

Toronto - MMIC, Macdonald Block, Room M2-17, 900 Bay St., Toronto M7A 1C3

This report has not received a technical edit. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume any liability. Source references are included in the report and users are urged to verify critical information. Recommendations and statements of opinions expressed are those of the author or authors and are not to be construed as statements of government policy.

If you wish to reproduce any of the text, tables or illustrations in this report, please write for permission to the Team Leader, Publication Services, Ministry of Northern Development and Mines, 933 Ramsey Lake Road, Level B4, Sudbury, Ontario P3E 6B5.

Cette publication est disponible en anglais seulement.

Parts of this report may be quoted if credit is given. It is recommended that reference be made in the following form:

Felix, V.E. 2005. Eagle Lake area high-density regional lake sediment and water geochemical survey, northwestern Ontario; Ontario Geological Survey, Open File Report 6104, 79p.

Contents

Abstract xi

Introduction 1

Regional Setting 3
- Bedrock Geology 3
- Physiography and Quaternary Geology 5

Methodology 5
- Sampling Methods 5
- Sample Preparation and Analytical Methods 6

Quality Control (QC) Results 6
- Methods 6
- General Assessment: Lake Sediments 7
  - Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma Optical Emission Spectrometry 7
  - Instrumental Neutron Activation Analysis 7
  - Fire Assay–Inductively Coupled Plasma Mass Spectrometry 10
- General Assessment: Lake Waters 10

Geochemical Data Interpretation 10

Discussion of Regional Patterns 14
- Limnological Parameters 14
- Lake Sediment Geochemistry 14

Description of Anomalous Areas 16

Summary and Conclusions 21

Acknowledgments 21

References 21

Appendix 1. Proportional Dot Maps of Loss-on-Ignition, Lake Depth, pH and Conductivity 23

Appendix 2. Proportional Dot Maps of Lake Sediment Geochemistry for Ag, As, Au (FA–ICP–MS and INAA), Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, Li, Mn, Mo, Nb, Ni, Pb, Pd, Pt, REEs, Sb, Th, U, V, W and Zn 28

Appendix 3. Lake Sediment Analytical Data for LOI, Ag, As, Au (FA–ICP–MS), Au (INAA), Cr, Cu, Fe, Mo, Ni, Pb, Pd, Pt, REEs, Sb, U, V and Zn 57

Metric Conversion Table 79

105-04866/

FIGURES

1. Location map of the Eagle Lake survey area. 1
2. Generalized bedrock geology of the Eagle Lake study area 2
3. Generalized Quaternary geology of the Eagle Lake study area 4
4. Location of selected geochemically anomalous lake sediment areas 12
5. Approximate land tenure showing geochemically anomalous areas described in text 14
6. Sample site location map of the Eagle Lake survey area ..... back pocket

TABLES

1. Eagle Lake area lake sediment data set, summary of elements analyzed by ICP, FA–ICP and INAA and quality control data, including estimates of precision. 8
2. Eagle Lake area lake water data set, summary of elements analyzed by ICP–MS and quality control data, including estimates of precision. 9

Miscellaneous Release—Data 145

Lake Sediment and Water Analytical Data for the Eagle Lake Area, Northwestern Ontario
by V.E. Felix.

Lake sediment geochemical and lake water quality (limnological) data, including quality control data, collected from a survey of 932 sites in the Eagle Lake area, are being released in conjunction with Open File Report 6104. Data are available as Microsoft® Excel 97 (*.xls*) files on one CD-ROM.

Abstract

The Ontario Geological Survey carried out a helicopter-supported high-density lake sediment and water geochemical survey of the Eagle Lake area of northwestern Ontario during the summer of 2002. The survey area is located approximately 300 km northwest of Thunder Bay and covers an area represented on National Topographic System (NTS) 1:50 000 scale map sheets 52 F/11, 52 F/13, 52 F/14 and 52 F/15. Lake sediment and/or water samples were collected from a total of 932 lake sites and analyzed for a suite of over 50 elements. Preliminary interpretation of these analyses indicates 13 geochemically anomalous areas, including anomalous results for Au, Pd, Pt, Cu, Ni, Mo, U and Zn. As of January 2005, many of these areas were available for staking. Digital data for this report are available separately as Miscellaneous Release—Data (MRD 145).

Eagle Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario

V.E. Felix[1]
Ontario Geological Survey
Open File Report 6104
2005

---

[1]Sedimentary Geoscience Section, Ontario Geological Survey

Introduction

Field work for a high-density lake sediment and water geochemical survey for the Eagle Lake area was carried out during the periods June 17 to June 29, and August 8 to August 26, 2002. The survey area is located approximately 300 km northwest of Thunder Bay (Figure 1) and covers an area of approximately 4000 km^2. The survey area is represented on National Topographic System (NTS) 1:50 000 scale map sheets 52 F/11, 52 F/13, 52 F/14 and 52 F/15. Lake sediment and/or water samples were collected at a total of 932 sites, providing an average density of 1 sample per 4.3 km^2. Glaciolacustrine sediments, prevalent in the areas represented by map sheets 52 F/14 and 52 F/15, resulted in relatively low sample densities for these map areas of 1 sample per 8.4 km^2 and 10.5 km^2, respectively. The area represented by map sheets 52 F/11 and 52 F/13 have higher densities of 1 sample per 3.88 km^2 and 2.16 km^2, respectively, due to the rugged bedrock-controlled terrain.

The Eagle Lake area was selected for this type of survey for reasons including client interest in the area, geology with favourable mineral potential and minimal geochemical exploration data for the region. The present survey lies immediately adjacent to the Sturgeon Lake–Wabigoon Lake survey area (Russell 2004) and immediately south of the Perrault Falls lake sediment survey area (Ontario Geological Survey 2002a). The National Geochemical Reconnaissance (NGR) lake sediment program carried out by the Geological Survey of Canada in 1988 covered the western portion of the current survey area at an average sample density of 1 sample per 13 km^2 (Hornbrook and Friske 1989). The current program provides new regional geochemical data at a relatively high resolution.

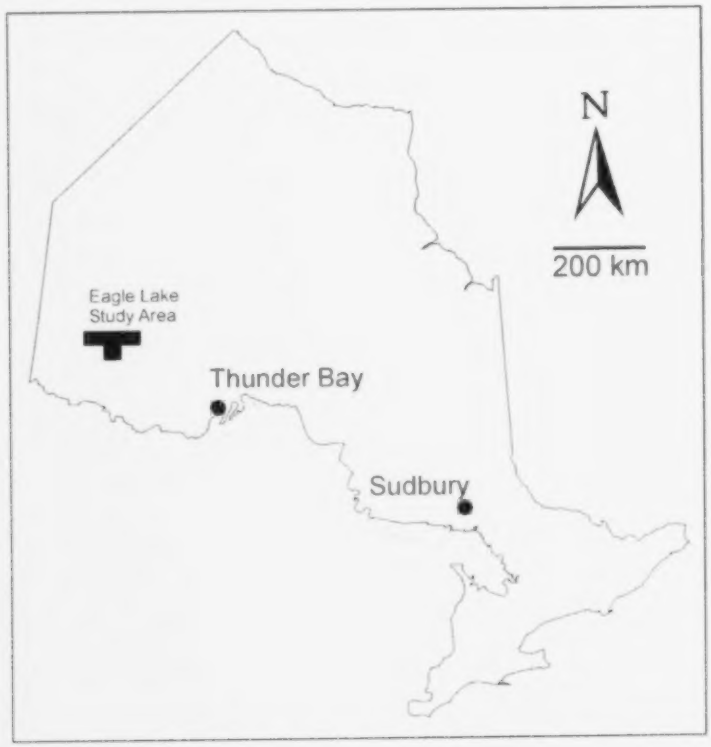


Figure 1. Location map of the Eagle Lake survey area.

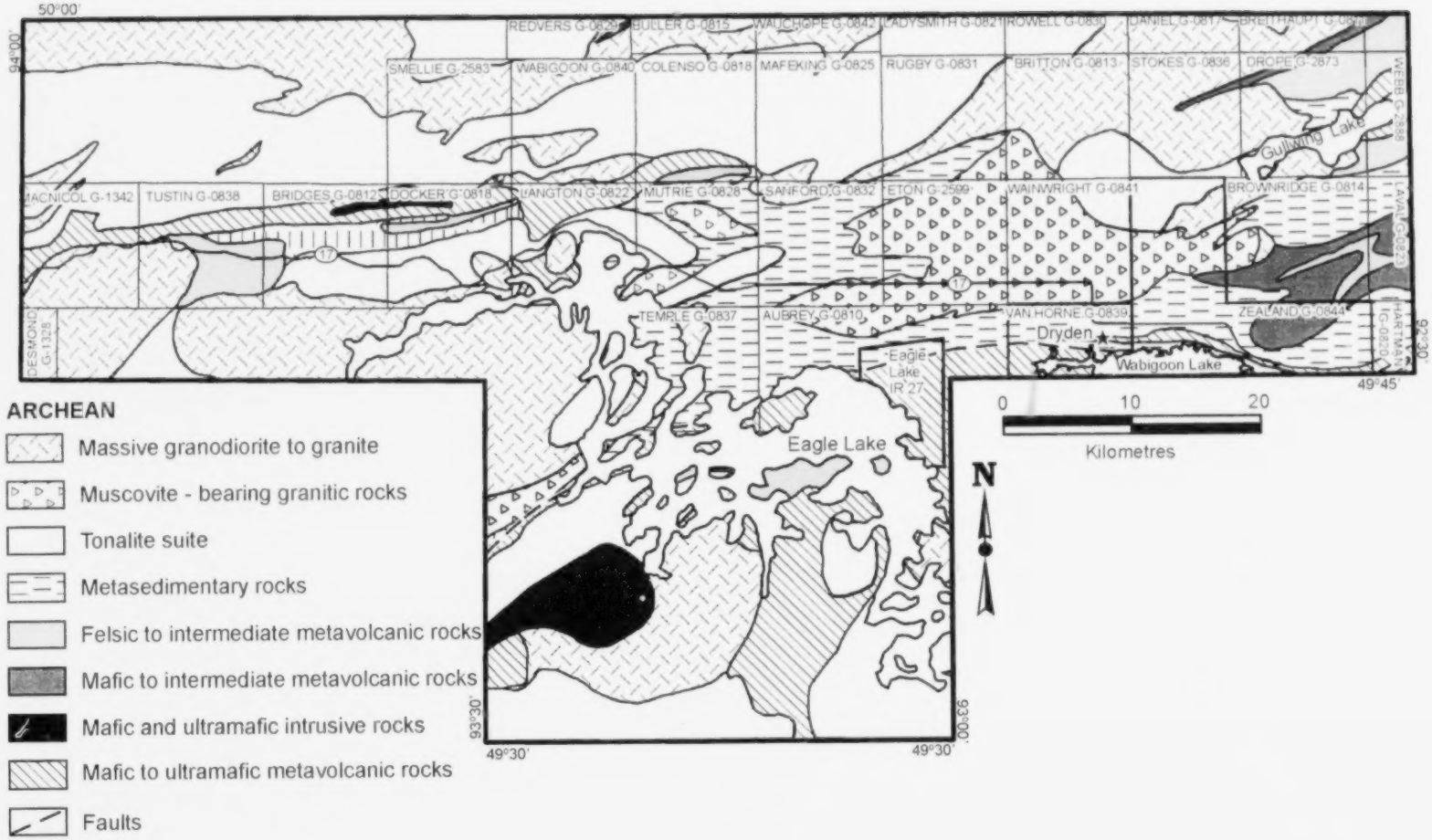


Figure 2. Generalized bedrock geology of the Eagle Lake study area (from Ontario Geological Survey 1991).

Regional Setting

BEDROCK GEOLOGY

The regional bedrock geology of the survey area is represented at a scale of 1:253 440 on an Ontario Geological Survey (OGS) Geological Compilation Series map (Blackburn 1981). In addition, a number of more detailed bedrock mapping surveys have been completed in the region. In the western part of the survey area, the townships of MacNicol, Tustin, Bridges and Docker, were mapped by Pryslak (1976) at a scale of 1:31 680. Breaks and Kuehner (1984) mapped the Eagle River–Ghost Lake area to the north and west of the town of Dryden at a scale of 1:31 680. Sutcliffe and Smith (1985) mapped the Mulcahy gabbro intrusion southwest of Eagle Lake. Berger (1990) mapped Laval and Hartman townships, located at the eastern edge of the area, at a scale of 1:20 000. More recently, Beakhouse (2000, 2001) began a multi-year mapping program to examine the geology and mineral potential of the Wabigoon Lake area, which is partially contained in the eastern portion of the survey area. Breaks, Selway and Tindle (2001) highlighted a number of regions within the present survey area with rare-element pegmatite potential.

Two distinct supracrustal belts occur in the survey area (Figure 2). In the Eagle Lake area, a belt of metavolcanic rocks form the western expression of the arcuate Eagle–Wabigoon–Manitou Lakes greenstone belt (Blackburn et al. 1991). Stratigraphy of the greenstone belt in the Eagle Lake area consists of a lower unit of Fe-Mg tholeiites (Eagle Lake volcanics), which is unconformably overlain by a mixed tholeiitic/calc-alkaline unit (Lower Wabigoon volcanics). This unit is, in turn, conformable with the overlying Upper Wabigoon volcanics, consisting of Fe-tholeiites and calc-alkaline rocks. The greenstone belt is intrusively bounded to the south by the Atikwa batholith and to the north by the Wabigoon fault. The Mulcahy Lake intrusion, a layered mafic to ultramafic intrusion, lies to the southwest of the volcanic belt. Ages obtained by Smith (1987) indicate that the Mulcahy Lake intrusion is younger than the volcanic assemblage, but predates emplacement of the Atikwa batholith.

In the western part of the survey area, the Vermilion Bay greenstone belt strikes east-northeast for approximately 58 km with a maximum width of about 6.4 km near Medicine Lake. This belt appears to be an extension of the metasedimentary and mafic to intermediate metavolcanic rocks of the Lake of the Woods greenstone belt in the Kenora area. The Vermilion Bay belt consists of mafic to intermediate metavolcanic flows and pyroclastic rocks, which are complexly interlayered with metasedimentary rocks composed of greywacke, calc-silicate gneiss, massive calc-silicate rocks and iron formation (Pryslak 1976). The metasedimentary and metavolcanic rocks are intruded by various dikes, sills and irregular bodies ranging in composition from felsic to ultramafic. The northern contact between the greenstone belt and the granitic rocks is interpreted to be the division between the Wabigoon Subprovince to the south and the Winnipeg River Subprovince to the north (Russell 2002). The southern part of the greenstone belt is intrusively bounded by the Dryberry batholith, a multi-phase granitic intrusion with ages ranging from 2716 to 2663 Ma.

The eastern part of the survey area, north of the Wabigoon fault, is characterized by alternating panels of metavolcanic and metasedimentary rocks. In the Thunder Lake area, wacke-siltstone of the Thunder Lake sediments is predominant in 2 separate areas separated along a portion of their strike length by a dominantly felsic volcanic unit (Beakhouse 2000). Thin magnetite ironstone layers are a minor component within the lower portion of the Thunder–Ghost Lake sediments. In the Ghost Lake area, the uppermost sediments are also interlayered with thin mafic metavolcanic units (Brownridge Volcanics)(Beakhouse 2001). The Ghost Lake batholith (2685 Ma) is a strongly peraluminous felsic intrusive rock associated with rare-element pegmatites.

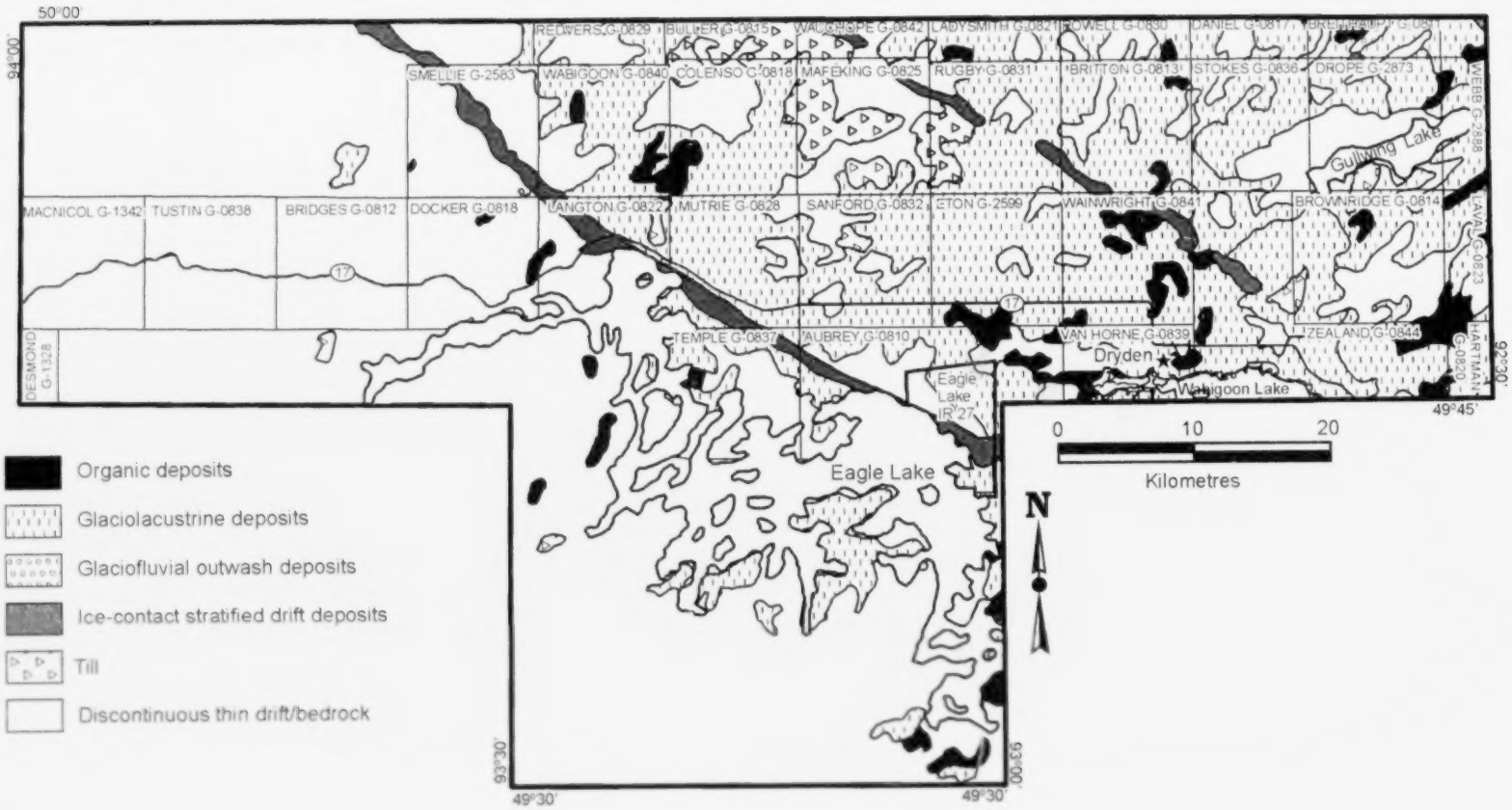


Figure 3. Generalized Quaternary geology of Eagle Lake study area (from Barnett et al. 1991).

PHYSIOGRAPHY AND QUATERNARY GEOLOGY

Engineering geology terrain maps have been produced for the area at a scale of 1:100 000 (Roed 1980a, 1980b). These maps, developed mainly from the interpretation of aerial photographs, comprise the most detailed Quaternary mapping for the area. Local relief in the survey area is variable, though generally less than 40 m. Topography in the survey area is controlled by the distribution of surficial sediments and differential erosion of the underlying bedrock.

A generalized Quaternary geology map for the survey area is shown in Figure 3. Glaciolacustrine clay, silt and sand of glacial Lake Agassiz form a major component of the Quaternary deposits in the area. Local thicknesses of these sediments produce areas of very gentle topography in the vicinity of Wabigoon and Dinorwic lakes, Minnitaki Lake and the English River. These lowland areas generally have a marked decrease in the density of lakes. The other significant surficial deposits in the area are the stratified sand and gravel deposits of the Hartmann and Lac Seul moraines, which strike southeast across the centre of the study area (Barnett 1992). Deposits of till, glaciofluvial outwash and recent organic material (peat and muck) are thin and discontinuous throughout the area and are separated by areas of knobby and ridged bedrock.

Methodology

SAMPLING METHODS

Sediment sampling was performed primarily by a two-person team from a float-equipped Bell 206B helicopter. However, where access was available and the number of samples warranted, some lakes were sampled from an aluminum boat with a 25-horsepower motor. An overall average of 13.5 lakes were sampled for each hour of helicopter time. The samples were collected using a gravity corer designed by the OGS. Samples were taken from depths >20 cm below the sediment–water interface (SWI) in order to minimize or avoid anthropogenic influences and SWI effects. These deeper sediments more accurately reflect the natural geochemical inputs, which may be traced back to local bedrock geology (Dyer 1998). The samples were extruded from the collection tube into breathable fabric bags and then placed in a sealable plastic bag until the end of the sampling run.

Lake water samples were taken simultaneously with the sediment samples. On lakes <3 m deep, water samples were collected at a depth of 0.5 m below the water surface, whereas on lakes deeper than 3 m, samples were collected at a depth of 2 m. A semi-automated water sampling apparatus, developed by the OGS, was used for the collection of samples. The apparatus consists of a submersible pump, a water quality meter (YSI) for measurement of parameters such as pH, temperature and conductivity, a sample bottle tray and a variety of hoses and valves. Water from the lake was pumped through the system in order to purge it prior to the collection of a sample and the recording of water quality data. The water samples were kept cool immediately following collection and were processed (filtered and acidified) within 24 hours of collection.

Sample site locations were recorded using a GPS receiver mounted in the cockpit of the helicopter. A customized database application operating from a pen-based computer was used to record the sediment sample information and descriptions. Water quality data were downloaded from the YSI using the program Ecowatch™.

SAMPLE PREPARATION AND ANALYTICAL METHODS

Sediment samples were allowed to partially air dry in porous collection bags in the field prior to delivery to the OGS Geoscience Laboratory (GeoLabs). A total of 877 sediment samples were submitted to the laboratory. The samples were freeze dried, partially pulverized in a ceramic ring mill and sieved to obtain the –80 mesh (<177 μm) size fraction.

Laboratory analysis by GeoLabs consisted of nitric-aqua regia digestion of 0.5 g of sample pulp followed by inductively coupled plasma mass spectrometry (ICP–MS) and inductively coupled plasma optical emission spectrometry (ICP–OES) for the determination of approximately 50 trace and major elements. Nitric-aqua regia digestion attacks all sample matrix constituents except for silicate minerals and is, therefore, considered a non-selective, relatively strong partial extractant (Dyer 1998). GeoLabs also performed determination of loss-on-ignition (LOI) at 500°C under an oxygen atmosphere using an automated gravimetric technique.

Instrumental neutron activation analysis (INAA) using epithermal irradiation was performed by an external laboratory. Approximately 10 g of each sample pulp was pressed into briquettes prior to analysis by instrumental neutron activation analysis (INAA) for gold and a suite of 26 other elements. There was sufficient material to analyze 875 samples by INAA.

An external laboratory was contracted to perform low-level Au and PGE analysis by fire assay with an ICP–MS finish. Due to budgetary constraints, only 147 out of 877 lake sediment samples or 17% of the total population were submitted for analysis. Because of the need to restrict the number of samples submitted, only those with elevated (>90th percentile) Ni and /or Cu were analyzed (i.e., >49 ppm Ni and/or >55 ppm Cu). In previous OGS lake sediment surveys, samples with anomalous levels of Pd and Pt often occur with an accompanying base metal signature (e.g., Cu, Ni). For example, the Lac des Iles–Black Sturgeon River area lake sediment survey resulted in the identification of 34 discrete anomalous areas containing Pd and/or Pt and of those, 25 also contained elevated to anomalous levels of Cu and/or Ni (Dyer and Russell 2002).

Water samples were passed through 0.45 μm syringe filters and acidified to 1% ultrapure nitric acid within 24 hours of collection. Analysis of water included direct aspiration ICP–MS to determine approximately 50 elements including major cation and anion species. A total of 914 water samples were submitted to the GeoLabs for analysis.

Quality Control (QC) Results

METHODS

Quality control was monitored through sample pulp duplicates and certified reference materials ("standards") inserted into the sample sequence. Every 10th sediment sample submitted was a quality control (QC) sample. Each QC sediment sample consisted of either analytical (pulp) duplicates, certified reference standards (CRS) or an internal (OGS collected) bulk standard. Analytical pulp duplicates were prepared by halving 1 in 40 of the dried sample pulps and inserting them into the sample sequence. CANMET certified reference standards (LKSD-1 and LKSD-4, Lynch 1990) and 2 OGS internal standards were also inserted as dried pulps between the sample preparation and analysis stages. Every 20th sample was either a CRS or an OGS internal standard.

Analytical precision for each element was determined by plotting duplicate data on an X–Y chart and determining the variation of 95% of the data from a 1:1 ratio. Accuracy was determined by plotting the sequential values returned for certified reference standards inserted in the batch against a vertical scale of concentration and comparing this with the "provisional values" (Lynch 1990) for the standards. The mean and standard deviation of values returned for each standard were also compared with the provisional values.

Table 1 contains a summary of the lake sediment analytical data used to generate this report, including some basic statistics and estimates of precision for each element and coefficients of variation for the certified reference materials. A full listing of data used to prepare this table is contained in MRD 145 (published separately from this report).

Quality control results for lake waters are shown in Table 2. Quality of the analyses was monitored through the use of sample duplicates, certified reference standard SLRS-4 and blanks (distilled water).

GENERAL ASSESSMENT: LAKE SEDIMENTS

Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma Optical Emission Spectrometry

In general, the quality of the ICP–MS and ICP–OES data sets is excellent. There are no problems worth noting other than for Hg. The sample and solution preparation (acid digest) employed by this survey were not optimal for Hg determination, however, the QC screening indicates the data set is acceptable for publication and is, therefore, included in this report and the digital data release. The estimated precision of ±0.04 for Hg is somewhat better than in previously released lake sediment surveys.

Noise in the QC standards for the elements Hf, Nb, Sn and W can be attributed mostly to the natural low levels for these elements in lake sediment and the incomplete and varying digestion of the silicate phase within which these elements are most likely bound. This incomplete digestion is demonstrated by the low mean levels returned for many of the lithophile major and minor elements shown in the LKSD-1 and LKSD-4 results (*see* Table 1). For example, the certified level of titanium (Ti) in LKSD-1 is 3010 ppm obtained by total digestion (Lynch 1990). The mean result for Ti in LKSD-1 obtained by this study was 309 ppm via the "near total" aqua regia digestion.

The ICP–MS data for 5 lake sediment samples (Sites 632, 678, 703, 738 and 868) were removed from the data set due to laboratory QC issues. These samples do appear in the dot plots included in Appendix 2, but should be disregarded.

Instrumental Neutron Activation Analysis

Overall, the quality of the instrumental neutron activation analysis (INAA) was very good with the exception of Au. A meaningful quantitative assessment of the precision of Au was not possible due to the high number of analyses that were below the detection limit. Out of 41 duplicates pairs submitted for INAA, only 1 sample returned values above the detection limit of 2 ppb, and it was not reproduced in its associated duplicate. Significant noise in both the certified reference standards and internal OGS standards were observed and, therefore, caution should be used when interpreting the Au by INAA data. The accuracy of this data is also poor and is reflected in the high coefficients of variation as shown in Table 1.

The estimated precision of ±1.3 ppm for Ta is elevated, but is not surprising due to the naturally low levels of this element in lake sediments and the lack of sensitivity of the INAA method.

Table 1. Eagle Lake area lake sediment data set, summary of elements analyzed by ICP, FA-ICP and INAA and quality control data, including estimates of precision

Element	Analytical Method	Units	MDL	Lake Sediment				LKSD-1 Reference Standard			LKSD-4 Reference Standard		
				Median	RANGE		Estimated	Certified	Mean Q.C.	Coefficient of	Certified	Mean Q.C.	Coefficient of
					Min	Max	Precision	Value	Result	variation (%)	Value	Result	variation (%)
Ag	ICP-MS	ppm	0.04	0.11	<0.04	3.89	± 0.02	0.6	0.62	3.0	0.2	0.24	5.0
Al	ICP-OES	ppm	20	15354	255	34635	± 3500	41300	3847	12.2	31200	11453	7.0
As	INAA	ppm	0.5	2.7	0.5	105.0	± 1.4	40	38.0	2.0	16	16.5	3.1
Au	FA-ICP-MS	ppb	1	1	<1	20	n/a	5	12	133.2	2	-	-
Au	INAA	ppb	2	<2	<2	8	n/a	5	3	124.7	2	<2	93.5
Ba	ICP-MS	ppm	0.5	117.1	21.0	358.1	± 15	430	96.0	2.5	330	138.5	4.5
Be	ICP-MS	ppm	0.2	0.6	<0.2	10.0	± 0.1	1.1	0.1	0.0	1	0.5	5.9
Br	INAA	ppm	0.5	41.0	2.3	91.3	± 2	11	11.4	12.4	49	51.0	3.4
Ca	ICP-OES	ppm	500	6128	<500	25202	± 1200	77200	69934	2.5	12900	9541	4.2
Cd	ICP-MS	ppm	0.04	0.43	0.06	12.76	± 0.03	1.2	1.34	2.8	1.9	2.1	2.8
Ce	ICP-MS	ppm	0.2	77.7	9.4	300.0	± 5	27	18.1	8.2	48	40.1	3.7
Co	ICP-MS	ppm	0.04	9.28	<0.04	55.21	± 2	9	7.71	4.4	11	9.05	4.4
Cr	ICP-OES	ppm	1	29	6	110	± 9	12	13.3	11.2	21	19	6.6
Cs	ICP-MS	ppm	0.01	1.18	0.32	6.39	± 0.5	1.5	0.5	7.9	1.7	1.1	7.1
Cu	ICP-MS	ppm	0.4	32.9	<0.4	136.3	± 3	44	43.2	2.1	30	31	2.4
Dy	ICP-MS	ppm	0.02	2.67	0.37	12.01	± 0.02	-	1.72	9.5	-	2.95	2.5
Er	ICP-MS	ppm	0.02	1.36	0.16	6.72	± 0.2	-	0.97	10.0	-	1.70	2.5
Eu	ICP-MS	ppm	0.01	0.98	0.12	4.00	± 0.1	-	0.48	7.8	-	0.92	3.6
Fe	ICP-OES	ppm	20	15562	1338	135000	± 3500	18000	18574	5.4	27000	24914	4.6
Ga	ICP-MS	ppm	0.09	3.37	<0.09	10.00	± 1.4	-	2.11	8.8	-	4.18	6.6
Gd	ICP-MS	ppm	0.03	4.46	0.62	24.85	0.5	-	2.36	7.3	4.01	4.01	3.2
Hf	ICP-MS	ppm	0.02	0.03	<0.02	0.30	± 0.05	3.6	0.04	19.5	0.04	0.04	69.3
Hg	ICP-MS	ppm	0.08	0.09	<0.08	3	± 0.04	110	0.13	4.9	190	0.19	5.5
Ho	ICP-MS	ppm	0.006	0.51	0.06	2.36	± 0.05	-	0.35	9.3	0.6	0.60	2.7
K	ICP-OES	ppm	20	765	108	5457	± 600	9100	385	12.4	6600	842	10.8
La	ICP-MS	ppm	0.1	39.2	4.7	200.0	± 4	16	10.6	5.6	26	21.6	3.4
Li	ICP-OES	ppm	0.9	7.0	<0.9	135.0	± 4	7	3.6	14.4	12	7.47	11.7
LOI	Grav	%	0.01	41.90	4.09	77.39	± 1	23.5	22.52	0.9	40.8	40.44	0.9
Lu	ICP-MS	ppm	0.005	0.17	0.02	1.00	± 0.02	0.4	0.14	8.4	0.5	0.25	3.7
Mg	ICP-OES	ppm	6	2653	<6	24772	± 750	10300	6333	5.0	5400	3841	6.1
Mn	ICP-OES	ppm	0.7	285	2	3884	± 60	460	410	4.9	430	396	3.9
Mo	ICP-MS	ppm	0.06	1.17	0.22	7.87	0.4	12	10.00	3.0	2	1.78	5.4
Na	ICP-OES	ppm	10	112	26	844	± 120	14800	272	23.1	5200	197	18.3
Nb	ICP-MS	ppm	0.04	0.91	0.13	3.40	±0.6	7	0.62	36.9	9	1.05	12.1
Nd	ICP-MS	ppm	0.09	33.61	4.20	192.20	± 2	16	12.11	6.7	25	22.59	3.4
Ni	ICP-OES	ppm	1	26	4	150	± 4	11	15	8.8	32	34	4.7
P	ICP-OES	ppm	10	1182	79	4800	± 100	900	735	3.7	1300	1325	4.1
Pb	ICP-MS	ppm	0.3	7.1	2.0	126.2	± 1.5	84	82.9	2.6	93	94.2	2.1
Pd	FA-ICP-MS	ppb	0.1	0.7	<0.1	6.1	n/a	-	0.10	70.7	-	-	-
Pr	ICP-MS	ppm	0.03	9.23	1.13	40.00	± 1	-	2.91	6.8	-	5.75	3.4
Pt	FA-ICP-MS	ppb	0.1	0.5	<0.1	11.9	n/a	-	1.5	193.5	-	-	-
Rb	ICP-MS	ppm	0.06	11.87	<0.06	63.24	± 6	24	3.60	7.4	28	10.16	7.8
S	ICP-OES	ppm	20	2920	30	25613	± 100	15700	14936	2.3	9900	9514	3.8
Sb	ICP-MS	ppm	0.03	0.11	<0.03	6.04	± 0.02	1.2	0.63	9.7	1.5	1.17	23.4
Sc	ICP-OES	ppm	0.1	2.8	0.2	18.0	± 1.3	9	2.07	18.6	7	3.25	10.1
Sm	INAA	ppm	0.05	6.1	1.0	28.5	± 0.2	4	2.36		5		
Sn	ICP-MS	ppm	0.7	<0.7	<0.7	20.0	± 0.75	16	3.3	3.6	5	3.2	18.7
Sr	ICP-MS	ppm	0.9	27.4	<0.9	121.2	± 7	250	67.0	2.8	110	40.5	4.0
Ta	INAA	ppm	0.5	<0.5	<0.5	1.9	± 1.3	0.3			0.4		
Tb	ICP-MS	ppm	0.006	0.57	0.08	2.79	± 0.1	0.6	0.33	7.6	1.2	0.56	3.6
Th	ICP-MS	ppm	0.02	1.63	<0.02	20.05	± 1.8	2.2	1.36	13.9	5.1	1.84	7.5
Ti	ICP-OES	ppm	8	227	4	1808	± 260	3010	309	27.0	2270	403	14.0
Tl	ICP-MS	ppm	0.05	0.21	<0.05	1.00	±0.03	-	0.22	6.1	-	0.44	5.8
Tm	ICP-MS	ppm	0.006	0.19	0.02	0.85	± 0.02	-	0.14	9.2	-	0.25	3.2
U	ICP-MS	ppm	0.03	3.74	0.27	90.00	± 1.0	9.7	9.08	2.4	31	30.47	1.9
V	ICP-OES	ppm	0.4	33.0	5.4	180.0	± 8	27	21	12.0	32	32	6.1
W	ICP-MS	ppm	0.2	<0.2	<0.2	16.1	± 0.12	<4	0.59	15.0	<4	0.24	21.3
Y	ICP-MS	ppm	0.05	13.49	0.59	75.47	± 1	19	10.30	8.3	23	17.13	3.2
Yb	ICP-MS	ppm	0.02	1.17	0.14	5.38	± 0.1	2	0.87	9.7	2	1.60	3.5
Zn	ICP-OES	ppm	1	74	14	730	± 8	337	315	2.3	189	183	3.5
Zr	ICP-MS	ppm	0.4	0.91	0.20	20.00	± 3	134	1.2	30.4	105	0.9	102.4

Notes:

1. ICP-MS= Inductively Coupled Plasma Mass Spectroscopy (aqua regia digestion)
2. ICP-OES= Inductively Coupled Plasma Optical Emission Spectroscopy (aqua-regia digestion)
3. INAA= Instrumental neutron activation analysis
4. MDL=method detection limit
5. Estimated precision at 95% confidence level: ICP-MS, OES and INAA elements based on 41 duplicate pairs.
6. For lake sediments analysis by: ICP-MS and ICP-OES: n=877; FA-ICP-MS n=147; INAA n=875
7. Only lake sediments with elevated (>90th percentile) Au and/or Cu were analysed for Au, Pd and Pt by FA-ICP-MS (n=147).
8. Q.C. Result = Average value obtained: Eagle Lake area survey
9. Coefficient of variation at one standard deviation (68% confidence level)
10. LKSD-1 and LKSD-4 are Canmet certified reference materials:
    For ICP elements, quoted reference values for Ag, As, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, V, Zn determined by partial digestion; all other ICP elements determined with total digestion.
    For INAA elements, quoted reference values for LKSD-1 and LKSD-4 are from total digestion methods.
11. For analysis of LKSD-1 and LKSD-4 by ICP-MS, OES and INAA: n=18 (LKSD-1) and n=17 (LKSD-4).
    For analysis by FA-ICP-MS: n=4 (LKSD-1).

Table 2. Eagle Lake area lake water data set, summary of elements analyzed by ICP-MS and quality control data, including estimates of precision.

				Lake water (n=914)				SLRS-4 (n=11)		
Element	Analytical Method	Units	MDL	Median	RANGE Min	RANGE Max	Estimated Precision	Certified Value	Mean Q.C. Result	Coefficient of variation (%)
Ag	ICP-MS	ppb	0.03	<0.03	<0.03	0.04	n/a	-	<0.03	0.0
Al	ICP-MS	ppb	0.1	47.7	2.8	350	±22.3	54	50.5	3.5
Ba	ICP-MS	ppb	0.03	6.61	0.57	179.38	±1.05	12.2	13.05	2.0
Be	ICP-MS	ppb	0.008	0.008	<0.008	0.246	±0.008	0.007	<0.008	53.7
Ca	ICP-MS	ppb	200	3243	386	25110	±963	6200	5513	4.5
Cd	ICP-MS	ppb	0.002	0.01	<0.002	1.29	±0.022	0.012	0.017	18.6
Ce	ICP-MS	ppb	0.0002	0.2218	0.0052	3.4294	±0.1491	0.012	0.371	1.3
Co	ICP-MS	ppb	0.006	0.022	<0.006	2.28	±0.015	0.033	0.031	5.7
Cr	ICP-MS	ppb	0.004	0.252	0.040	1.885	±0.091	0.33	0.306	6.6
Cs	ICP-MS	ppb	0.0003	0.0065	0.0013	0.6154	±0.0046	-	0.0067	7.1
Cu	ICP-MS	ppb	0.06	0.93	0.23	188.70	±3.5	1.81	2.03	7.5
Dy	ICP-MS	ppb	0.001	0.014	<0.001	0.121	±0.005	-	0.023	5.1
Er	ICP-MS	ppb	0.001	0.009	<0.001	0.07	±0.004	-	0.014	3.7
Eu	ICP-MS	ppb	0.0007	0.0041	<0.0007	0.0425	±0.0019	-	<0.0007	10.9
Fe	ICP-MS	ppb	0.4	75.6	2.8	1392.5	±24.9	103	99	3.5
Ga	ICP-MS	ppb	0.001	0.006	<0.001	0.104	±0.004	-	0.012	10.5
Gd	ICP-MS	ppb	0.001	0.019	<0.001	0.154	±0.009	-	0.033	8.5
Ho	ICP-MS	ppb	0.003	0.003	<0.003	0.03	±0.0015	-	0.005	9.9
La	ICP-MS	ppb	0.001	0.159	0.005	2.108	±0.086	-	0.298	2.4
Li	ICP-MS	ppb	0.03	0.6	0.1	2.7	±0.15	-	0.42	4.7
Lu	ICP-MS	ppb	0.0003	0.0014	<0.0003	0.0097	±0.0008	-	0.0020	12.7
Mg	ICP-MS	ppb	50	855	148	>4000	±358	1600	1464	3.1
Mn	ICP-MS	ppb	0.08	1.40	0.13	150	±2.43	3.37	3.29	4.1
Mo	ICP-MS	ppb	0.005	0.034	<0.005	0.919	±0.039	0.21	0.198	7.5
Nd	ICP-MS	ppb	0.004	0.146	<0.004	1.819	±0.057	-	0.275	2.6
Ni	ICP-MS	ppb	0.08	0.31	<0.08	5.16	±0.14	0.67	0.56	7.3
Pb	ICP-MS	ppb	0.002	0.121	0.009	14.591	±0.104	0.086	0.095	6.5
Pr	ICP-MS	ppb	0.0003	0.038	0.0009	0.4969	±0.00155	-	0.0710	2.7
Rb	ICP-MS	ppb	0.07	1.60	0.1	9.84	±0.27	-	1.50	3.7
Sb	ICP-MS	ppb	0.003	0.034	0.012	0.178	±0.008	0.23	0.259	3.0
Sc	ICP-MS	ppb	0.06	0.36	<0.06	1.95	±0.14	-	0.80	10.2
Sm	ICP-MS	ppb	0.002	0.025	<0.002	0.259	±0.009	-	0.058	3.1
Sn	ICP-MS	ppb	0.004	<0.004	<0.004	0.069	±0.011	-	0.006	19.2
Sr	ICP-MS	ppb	2	13	<2	66	±2	26.3	27.5	3.4
Tb	ICP-MS	ppb	0.0004	0.0026	<0.0004	0.022	±0.0014	-	0.0045	7.5
Th	ICP-MS	ppb	0.001	0.0245	<0.001	0.157	±0.016	-	0.010	15.7
Ti	ICP-MS	ppb	0.001	0.6715	0.076	11.721	±0.341	-	1.553	3.6
Tl	ICP-MS	ppb	0.0002	0.0044	0.0013	0.035	±0.001	-	0.0069	8.0
Tm	ICP-MS	ppb	0.0003	0.0013	<0.0003	0.0101	±0.0007	-	0.0020	11.5
U	ICP-MS	ppb	0.0007	0.048	0.0016	1.5039	±0.0103	0.050	0.0495	3.0
V	ICP-MS	ppb	0.03	0.17	<0.03	2.34	±0.06	0.32	0.33	3.8
W	ICP-MS	ppb	0.0007	0.0016	<0.0007	0.0323	±0.0014	-	0.0052	21.4
Y	ICP-MS	ppb	0.003	0.086	0.003	0.658	±0.022	-	0.135	2.2
Yb	ICP-MS	ppb	0.0008	0.009	<0.0008	0.07	±0.0038	-	0.0123	8.0
Zn	ICP-MS	ppb	0.1	0.9	0.1	142.9	±3.8	0.93	1.3	10.7
Zr	ICP-MS	ppb	0.004	0.134	0.005	6.796	±0.104	-	0.088	4.0

Notes:

1 ICP-MS= Inductively Coupled Plasma Mass Spectroscopy

2 MDL=method detection limit

3 Estimated precision at 95% confidence level based on results of 70 duplicate pairs

4 SLRS-4= National Research Council St. Lawrence River Standard-4, certified reference standard

Fire Assay–Inductively Coupled Plasma Mass Spectrometry

Only 147 out of 877 lake sediment samples were submitted for analysis by FA–ICP–MS for Au, Pd and Pt. This represents approximately 17% of the entire population of lake sediment samples collected in the survey area. Only samples with elevated (>90th percentile) Ni and/or Cu were analyzed (i.e., >49 ppm Ni and/or >55 ppm Cu) were analyzed by this method. This should be kept in mind when interpreting the FA–ICP–MS data set, as the statistical data (i.e., minimum, maximum and median values) of this discrete data subset may not be representative of the entire lake sediment population of the study area. Due to the smaller size of the data set (and fewer QC duplicate pairs) estimated precision at the 95% confidence level could not be reasonably calculated for Au, Pd and Pt.

However, review of the performance of both OGS and certified reference material indicates acceptable accuracy and no significant spikes or analytical drift is apparent for these elements. From previous OGS experience with the external lab that conducted the analyses, the precision of Au, Pd and Pt by FA–ICP–MS analysis has typically been in the range of ±2 to 3 ppb, ±1 to 2 ppb and ±1.5 to 2 ppb, respectively. It is assumed that a similar level of reproducibility has been achieved and the estimated precision to be comparable to these historical values.

GENERAL ASSESSMENT: LAKE WATERS

In general, the quality of the lake water data was excellent with no significant quality control problems in the elements reported.

A meaningful quantitative assessment of the precision of Ag was not possible due to the high number of analyses that were below the detection limit. Out of 70 duplicate pairs submitted, only 1 sample returned values above the detection limit of 0.03 ppb and it was not reproduced in its associated duplicate. Performance of the certified reference standard SLRS-4 and blanks indicates, however, that the data are acceptable for release.

The full lake water data set has been included in MRD 145.

Geochemical Data Interpretation

Factors to consider when assessing the possible significance and validity of lake sediment geochemical anomalies are as follows:

1. Correlation with geology

   In mineral exploration, correlation with geology is the most important factor when assessing the significance of a surficial geochemical anomaly, however, its relative importance declines as the known level of detail of the geology declines. Many of the geochemical anomalies discussed will help focus and prioritize future geological investigations.

2. Multi-site anomalies

   Multi-site anomalies provide separate verification of the "anomalousness" of a given area and provide some insurance against non-systematic errors in sample quality, collection, preparation or analysis. However, as samples are collected, prepared and analyzed in sequence, a uniform and numerically sequential anomaly may be the result of a systematic analytical or sample preparation error. This may

produce an apparent geographic grouping of fairly uniform concentrations in one, or possibly several, elements. As mentioned above, every effort has been made to detect this kind of problem but the user is reminded to consider all available data when assessing the importance of an anomaly.

3. Multi-element anomalies

Multi-element anomalies with geologically reasonable elemental assemblages are useful in assessing the importance of many anomalies. For example, Pt and Pd, which are relatively immobile in the surficial environment compared to base metals such as Cu, Cr, Ni, Pb and Zn, would not be expected to be found in anomalous levels in lake sediment without an accompanying base metal signature. Gold on the other hand, can occur in quartz vein deposits with little or no associated base metals; therefore, a gold anomaly by itself can be significant. A gold anomaly with an associated base metal signature may be even more significant. However, certain multi-element anomalies (e.g., Mo + Zn) can sometimes result from limnological factors (e.g., redox conditions related to deep lakes, relative level of organic material in the sediment).

4. Magnitude of the anomaly

The magnitude of an anomaly, perhaps surprisingly, is one of the least important assessment criteria. Magnitude depends not only on the size of a deposit but on its distance from the lake, the presence and effectiveness of sinks between the source and lake, the limno-geochemical conditions in the lake, the weatherability of the deposit and the nature of the surficial deposits (i.e., level of carbonate). The weatherability depends on factors such as exposure and/or depth of burial and specific mineralogy of the source. These factors combine to make magnitude an unreliable estimate of the importance of an anomaly except in extreme cases or in cases where multiple samples and/or media corroborate its importance.

5. Correlation with surficial geology

Unconsolidated deposits can, under certain circumstances, cause a greater impact on the chemistry of lake media than can bedrock. Carbonate-rich eskers and thick ice-contact stratified drift deposits often result in nearby lakes having relatively hard, alkaline waters. This type of lake water provides a geochemical matrix for trace elements which is very different to that of most shield lakes which are mildly acidic and organic-dominated. In general, most metals are relatively immobile in such alkaline conditions, therefore geochemical anomalies might be considered more significant and possibly relatively close to source.

Dilution or addition to the trace metal signature in sediments can occur due to the presence of fine-grained unconsolidated material such as clay. Often a spatial relationship can be seen between lake sediment anomalies and glaciofluvial deposits such as eskers. In general, the sample collection and preparation protocols employed by the OGS, when properly carried out, minimize the deleterious effects of exotic inorganic materials which may be present in the survey areas.

6. Redox conditions, lake depth and organic content

Not all spatial trends in geochemistry are due to lithological or mineralogical factors. The solubility of trace metals depends to a large extent on the geochemical matrix and, in particular, on pH and oxidation–reduction (redox) conditions. Redox conditions in a lake are usually controlled by thermal conditions which, in turn, are controlled by lake morphology and lake depth. If conditions are suitable for an element to preferentially partition into the lake sediment, factors that may influence (enhance) the concentration of the element include the abundance of Fe, Mn and organic material. The mechanisms that may lead to "false anomalies" include sorption (scavenging) by hydrous oxides

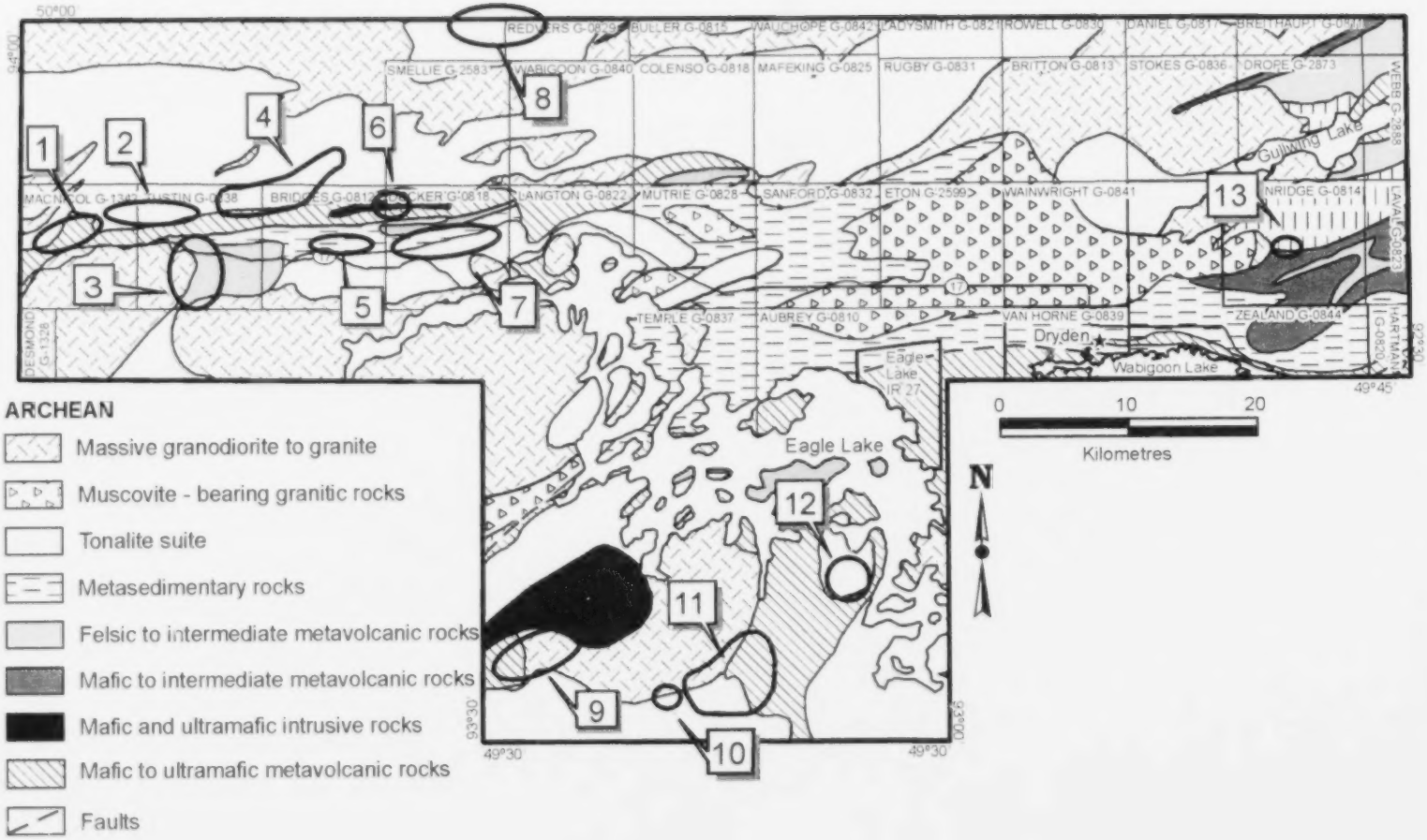


Figure 4. Location of selected geochemically anomalous lake sediment areas.

of Fe and Mn and the affinity of some elements to form organo-metallic complexes. Enrichment of some elements in the shallow (surface to 10 cm deep) sediment can occur due to the upward migration and precipitation or concentration of Fe and Mn (and other trace elements such as Co, Pb, Mo and Zn originally co-precipitated with Fe and Mn). The OGS sampling technique avoids the surface sediment and targets the deep (>20 cm) sediment thereby reducing or minimizing the effects Fe, Mn and base metal enrichment that may occur in the surface sediment, whether by redox cycling or by anthropogenic input. This assumes a similar sedimentation rate in all of the sampled lakes and that the lake sediments deposited over the past several hundred years being undisturbed. This may not always be true. Sedimentation rates can vary depending on the energy of and the input to the depositional environment. Other factors to consider are sediment slumpage and/or mudslides, the effects of wavebase and the activities of animals. Therefore, the inadvertent collection of some "mixed" (shallow and deep sediment) samples is unavoidable.

Discussion of Regional Patterns

LIMNOLOGICAL PARAMETERS

Over the entire survey area, water conductivities range from less than 20 to 210 µS/cm, with an overall average of 26 µS/cm. Values of high conductivity occur in areas underlain by bedrock mapped as either metavolcanic or metasedimentary rocks. The lower values of the data set occur in primarily granitic bedrock areas. A cluster of sample sites with high electrical conductivity values located along Highway 17 in MacNicol and Tustin townships suggest definite influence from contaminants (road salt, etc.).

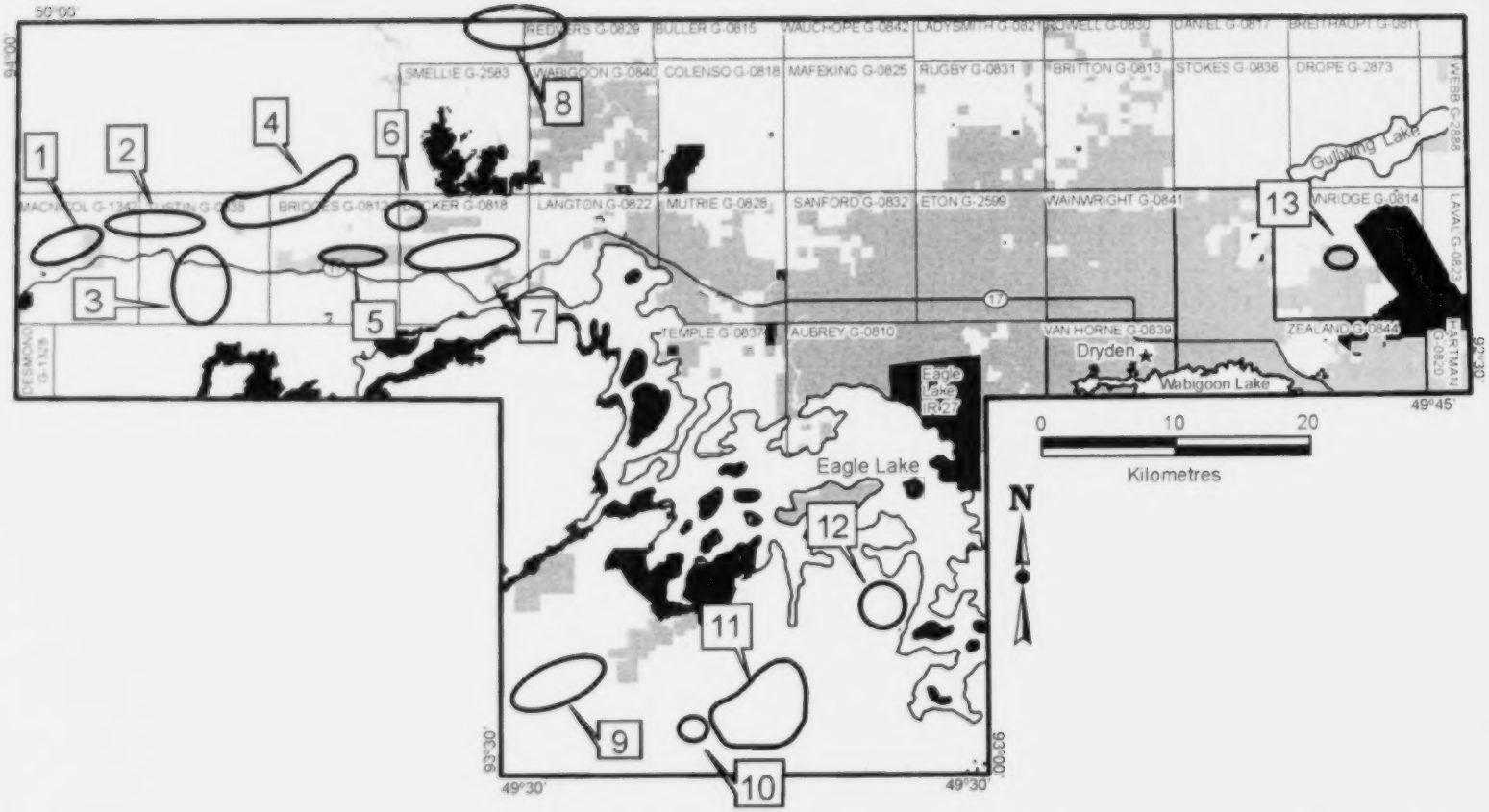
Values for pH in the study area range from 4.38 to 9.00, with an average of 6.83. Elevated pH is coincident, in part, with glaciolacustrine deposits in the central and eastern portions of the survey area. In the northwest, elevated values of pH may be related to glaciofluvial deposits of the Lac Seul moraine. For the most part, the landscape of the study area is characterized by neutral to slightly acidic pH conditions, which are amenable for hydromorphic dispersion of most trace elements into the lake basins.

The average lake depth for the study area was 7.9 m. An obvious pattern of deeper lakes exists in the western and southwestern portion of the survey area where the terrain is bedrock dominated.

LAKE SEDIMENT GEOCHEMISTRY

The lake sediment anomalies shown in Figure 4 and discussed in the following section are those which are of greatest interest to exploration. The selection is based not only on the geochemical results, but also takes into account such factors as the geology and regional geophysics. In some areas of the study area, sample site density was relatively poor; therefore, this survey was not able to geochemically assess all of the drainage catchments. In addition, since only a small portion of the total number of samples were submitted for gold and PGE analysis, the results of this survey cannot be considered exhaustive in terms of outlining or identifying all gold and/or PGE prospective areas. When following up the results of this survey, the reader is encouraged to consider pathfinder elements, such as copper, which is associated with gold occurrences in the Eagle Lake survey area. The following discussion is not exhaustive and the reader is encouraged to undertake further investigation utilizing all available exploration data sets.

Proportional dot maps for LOI, lake depth, pH and electrical conductivity were plotted on a generalized bedrock geology map of the study area and are shown in Appendix 1. Proportional dot maps of analytical results for Ag, As, Au (FA–ICP–MS and INAA), Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, Li,



Note: This figure is intended to represent the approximate state of land tenure as of January 2005. It is not a legal description and cannot be used as a substitute for the files of the regional Mining Recorder.

Figure 5. Approximate land tenure showing geochemically anomalous areas described in text.

Mn, Mo, Nb, Ni, Pb, Pd, Pt, REEs, Sb, Th, U, V, W and Zn are contained in Appendix 2. Appendix 3 contains a listing of lake sediment analytical data for these elements. In this report, samples with less than 10% LOI (approximately 2% of the data set) were not included in the data used for the production of the geochemical dot plots in Appendix 2. Samples with a low amount of organic matter tend to suppress the trace element signature due to the relative abundance of resistant quartz- and feldspar-rich material. Exceptions to this may include PGEs, which may show anomalous results in low-organic samples, especially when those samples were collected in the vicinity of mafic to ultramafic bedrock. All data, regardless of LOI value, have been included with the digital data released in conjunction with this report.

For most elements, concentrations exceeding the 90th percentile of the data set are defined as "elevated", concentrations greater than the 95th percentile are "anomalous" and concentrations greater than the 98th percentile are "highly anomalous". In some cases, precision estimates prohibited using these cut-off levels, so readers are encouraged to consult the legend that is included with each figure. Elemental concentrations of Au exceeding 7 ppb for the INAA and FA–ICP–MS data sets are considered to be of interest.

As of January 2005, many of the areas discussed in this report were available for staking. The approximate state of land tenure for the study area is shown in Figure 5. Readers are referred to the MNDM Provincial Recording Office for an up-to-date and precise description of the availability of land for staking. Sites referred to in the following discussion can be found on the sample location map (Figure 6, back pocket).

Description of Anomalous Areas

1. Willard Lake – Bruin Lake area (MacNicol Township)
   U, ±Ag, ±Be, ±Cd, ±Co, ±Fe, ±Mo, ±Mn, ±Pb, ±REEs, ±Sb, ±V, ±W, ±Zn

   Sites: 516, 518, 531, 533–535, 539, 991–993

This area is characterized by highly anomalous U at all 10 sample sites with values ranging from 29.8 to 77.6 ppm. Willard Lake was also sampled by the Geological Survey of Canada (GSC) (Hornbrook and Friske 1989) and returned a value of 39.4 ppm U. The Kenoratomic uranium occurrence lies immediately southeast of site 535. As well, the Richard Lake uranium prospect is located less than 100 m to the west of site 533 (OGS 2002b). Site 533 also returned highly anomalous levels of both Sb (0.32 ppm) and Pb (19.7 ppm). Several sites east and south of this area also had elevated levels of uranium.

Sites 991 and 992 located at the western end of Willard Lake also presented anomalous to highly anomalous levels of Be, Co, Mo, W, Fe, REEs and Mn. Other significant results include elevated to anomalous Sb at sites 516, 518 and 533 (0.20, 0.21 and 0.32 ppm, respectively) and anomalous Ag (0.22 ppm) at site 534.

Pryslak (1976) mapped the bedrock geology of this area as an east-trending metavolcanic-metasedimentary belt. The metavolcanic rocks, which form about 75 percent of this belt, vary in composition from mafic to intermediate, and consist of flows and pyroclastic deposits. Metasediments form the remaining 20%, and are mostly of clastic origin, except for minor amounts of metamorphosed iron formation.

Uranium occurrences in this area are associated with pegmatite.

As of January 2005, this area was open for staking, with the exception of the area around sites 533 to 535.

2. South of Linklater Lake (MacNicol and Tustin townships)
U, Cu, ±Au, ±Cd, ±Ni, ±Ag, ±Mo, ±Cs, ±Fe, ±Mn, ±Co, ±REEs, ±V, ±W, ±Zn, ±Pb

Sites: 515, 752–754

All 4 sites in this area returned elevated to anomalous values of U (19.1 to 63.4 ppm) and Cu (57.5 to 120.8 ppm). The copper value of 120.8 ppm at Site 754 was the 5th highest in the survey area. Three MDI uranium occurrences lie immediately south of this anomalous area (OGS 2002b).

Site 515 returned anomalous Au (11.9 ppb) by fire assay, the second highest gold value in the survey area.

Site 753 also returned elevated Cu and anomalous values of Ag, Cs, Cd, Co, Mn, Fe, W, Mo , REEs, V and Zn. Site 515 had a similar signature and returned anomalous values of Ag, Co, Mn, Fe, W, Pb, Mo, REEs, V and Zn.

The bedrock geology underlying this area was mapped by Pryslak (1976) as mafic to intermediate metavolcanic rocks. This anomalous area lies just south of the contact between the Wabigoon Subprovince and the granitic rocks of the Winnipeg River Subprovince to the north.

Enrichment of the lithophile elements in this area may be explained by the presence of rare-element pegmatite types and uranium- and thorium-enriched pegmatites that are associated with Late Archean granitic plutonism in the Dryden area.

This area was available for staking as of January 2005.

3. Windermere Lake area (Tustin Township) ±U, ±Ni, ±Cu, ±Zn, ±Cr, ±Ag, ±Au

Sites: 766–769, 771–773, 775, 777, 782

This area was identified primarily due to the presence of several lakes with anomalous uranium values, but also features 3 sites with anomalous Ni values. Sites 771 and 782 were single-site uranium anomalies with values of 50.2 and 36.3 ppm U, respectively. Uranium at the remaining sites ranged from 21.9 to 59.9 ppm U.

Anomalous values of Ni were returned from sites 766, 769 and 777 with values of 150, 57 and 70 ppm, respectively. The Ni value of 150 ppm at Site 766 was the highest in the survey area. Site 766 also contained the 5th highest value of Cr in the survey area (85 ppm), as well as being anomalous in Ag, Cu and Zn. Elevated to anomalous Ag was also found at sites 775 (0.19 ppm) and 772 (0.26 ppm).

Also of interest is the presence of Au by fire assay (9.8 ppb) at site 772.

The general bedrock geology underlying this area consists of felsic to intermediate metavolcanic rocks. The Dryberry granitic batholith occurs just south of this area. The presence of uranium anomalies suggests that uranium-bearing pegmatites may occur within the drainage catchments of this anomalous area. The Ni-Cu-Cr signature suggests that mafic to ultramafic rocks (gabbro and peridotite) are present within the intermediate to felsic metavolcanic rock package.

This area was available for staking as of January 2005.

4. Balmain Lake area (Tustin and Bridges Townships) U, Mo, ±Be, ±REEs, ±W, ±Co, ±Mn, ±Ag, ±Fe

Sites: 844–845, 847–848, 856

All 5 sites in this area returned both anomalous U (41.1 to 90 ppm) and Mo (2.9 to 5.7 ppm). The highlight of this area is site 845, which has the highest U value in the survey area (90 ppm) accompanied by a strong Mo anomaly (3.5 ppm).

Other interesting results include elevated to anomalous Be at all sites in this area, with the exception of 845 and elevated Fe at sites 847–848.

This area overlies the northern contact between the Vermilion Bay greenstone belt and granitic rocks to the north. This area is interpreted to be the division between the Wabigoon Subprovince to the south and the Winnipeg River Subprovince to the north (Russell 2002).

This area was open for staking as of January 2005.

5. Game Lake area (Bridges Township) Zn, Ag, Cd, ±Au, ±Cu, ±Pb, ±Ni, ±W, ±Sb

Sites: 817, 837–839, 861

This area consists of a fairly tight cluster of highly anomalous zinc and silver results. Anomalous zinc values ranged from 198 ppm Zn at Site 861 to 730 ppm Zn at Site 837. The highest Ag value came from Site 817 (0.69 ppm). Exploration activity by Rio Algom confirmed the presence of Ag in 3 drill holes surrounding this site (OGS 2002b). As well, the Crabclaw Lake Southwest Zinc occurrence is located west of this area. Two silver occurrences and a silver-copper occurrence are also located north of Site 817.

Site 817 also features a modest Au anomaly (8 ppb by INAA), not reproduced by FA analysis. A sample from a drill hole located approximately 1 km northeast of this site and within the same drainage catchment returned between 500 to 3000 ppb Au (OGS 2002b). This suggests that the result of 8 ppb Au is valid and may be related to the occurrence of Au in bedrock.

Site 838 has an anomalous Ni value of 83 ppm and Cu value of 121 ppm. Sites 861 and 837 also returned anomalous values of copper 63 and 67 ppm, respectively.

This area was mapped by Pryslak (1976) as fine- to coarse-grained metasediments with the grain size generally increasing toward the granitic Dryberry batholith that underlies the area to the south.

As of January 2005, this area was unavailable for staking.

6. East of Cobble Lake area (Bridges and Docker townships) Cu, ±Au, ±Cs, ±Cd, ±As

Sites: 863, 865–866

In this anomalous area, located east of Cobble Lake, copper is elevated to anomalous at all 3 sites. Copper values were strongly anomalous (above the 98th percentile) at sites 863 and 866 (95 and 107 ppm Cu, respectively). Also of interest is a Au value of 7 ppb (FA–ICP–MS) returned from site 863.

The bedrock geology, which underlies sites 863 and 866, is mapped as mafic and ultramafic intrusive rocks that have intruded the surrounding metavolcanic-metasedimentary belt (Pryslak 1976). Early felsic intrusive rocks underlie site 865.

The area surrounding sites 865 and 866 were available for staking as of January 2005.

7. Kimber Lake area (Docker Township) U, ±Mo, ±Be, ±Cd, ±Li

Sites: 873, 875–879

These 6 sites, located on Kimber Lake and lakes farther east, all returned elevated to anomalous values of U in the range of 23.5 to 65.2 ppm. Sites 875 and 876 also contained elevated and anomalous Mo (2.4 ppm and 3.4 ppm, respectively). Beryllium was elevated at sites 875 and 877. The Kimber Lake uranium occurrence is located east of site 873.

The bedrock geology in this area was mapped by Pryslak (1976) as felsic intrusive rocks of the Dryberry batholith. Migmatite is common along the contacts with the metavolcanic-metasedimentary belt to the north.

As of January 2005, the area north of site 873 was unavailable for staking. The remainder of this anomalous area, however, was open for claim staking.

8. Bowden Lake area (Redvers Township) Ni, Th, Cr, ±Ag, ±Zn, ±Li, ±REEs

Sites: 191–199, 201

All 10 sites located on Bowden and Yellow lakes in Redvers Township returned elevated to anomalous levels of Ni, Th and Cr. Sites 191, 193, 195, 196 and 201 also presented elevated Ag.

The bedrock was mapped by Blackburn (1981) as felsic and intermediate intrusive rocks. An east-trending fault structure cuts through this area.

The area west of site 195 was available for staking as of January 2005.

9. Northwest of Line Lake area ±Cu, ±Mn, ±V

Sites: 676, 677, 679, 681, 684, 917

This area is characterized by elevated to anomalous levels of Cu at all sites. Sites 676, 677, 679, 684 and 917 were single element anomalies with Cu values of 78, 67, 54, 59 and 60 ppm, respectively. Site 681 returned the highest value of Cu (95 ppm) in this area as well as elevated Mn (643 ppm) and V (64 ppm). Sites 676 and 681 were also sampled by the GSC (Hornbrook and Friske 1989), with reported results of 92 and 100 ppm Cu, respectively.

Site 678, located southwest of Site 681 returned anomalous values of Ag, W, Sb, Mo, Cd and Be. These high values were found to be related to an isolated QC issue at the laboratory and should be disregarded. The ICP–MS data for this sample was removed from Appendix 3 and the MRD, but is shown on the dot plots included in Appendix 2. Other methods of analysis (ICP–OES, INAA and FA–ICP–MS) were not affected.

The general bedrock geology underlying this area consists of mafic metavolcanic rocks of the Kagaki–Rowan greenstone belt, in contact with granitic rocks of the Atikwa batholith to the west. The Mulcahy Lake gabbro intrusion lies to the north just outside of this anomalous area.

Atikwa Minerals Limited is currently carrying out exploration work for Cu, Ni and PGMs at the Mulcahy property in the Line Lake area (Lichtblau et al. 2004). Emerald Fields Resource Corporation also holds active claims in the area. Previous work in the area includes 9 DDHs drilled by Falconbridge Nickel Mines Ltd. near the contact between the Mulcahy gabbro and metavolcanic contact.

The presence of elevated to anomalous Cu over the metavolcanic rocks may indicate the presence of additional gabbro lenses or could be related to shearing and/or alteration of the metavolcanic rocks.

As of January 2005, this area was available for staking.

10. East of Oldcamp Lake — Au

Site: 601

This is a single-site, single-element gold anomaly. Site 601 returned 8 ppb Au by INAA. Gold analysis by FA–ICP–MS was not carried out on this sample. Blackburn (1981) mapped this area as felsic to intermediate intrusive rocks of the Atikwa batholith.

This area was available for staking as of January 2005.

11. Passover Lake area — ±Cu, ±Ag, ±Pd, ±Au, ±Zn, ±Ni, ±Co, ±Cd, ±Sb, ±REEs, ±W, ±Mo

Sites: 435, 443, 447, 448, 451–455, 571, 573–575, 577, 578, 582, 585, 586, 591, 592, 594, 596, 597, 603, 604

Twenty-five sites make up this broad copper anomaly, which extends for approximately 10 km from Robbins Lake in the north to Canal Bay (Atikwa Lake) in the south. Copper was elevated to highly anomalous at 19 of the sites. In general, Cu values increased from south to north with the highest value of Cu in the Eagle Lake survey area occurring at site 571 (136 ppm). Site 571 also returned anomalous Ag (0.37 ppm), W (0.27 ppm) and elevated Mo (2.8 ppm).

Silver was also widespread throughout the area. Elevated to anomalous values were returned from 11 sites with values in the range of (0.19 to 0.37 ppm Ag). Nickel was elevated (52 ppm Ni) at a single site (Site 447). Zinc and cobalt were also anomalous (151 and 22 ppm, respectively) at a single site (Site 592).

Of special interest is site 578 on Chancellor Lake, which returned 6.1 ppb Pd, the highest Pd value in the survey. Copper was also elevated (59 ppm Cu) at this site. Site 577, located immediately southeast of Chancellor Lake, returned 10.3 ppb Au by FA–ICP–MS.

This anomalous area is situated over the dioritic rocks of the Atikwa batholith and its contact with mafic metavolcanic rocks of the western expression of the Eagle–Wabigoon–Manitou lakes greenstone belt. A number of fractures and lineaments strike northeast throughout this area.

The Macfie nickel-silver occurrence is located north of Chancellor Lake (OGS 2002b). The Meridian Bay gold occurrence is located on Meridian Bay of Eagle Lake between Chancellor Lake and the Macfie occurrence. Grab samples of sulphide-rich material from the Meridian Bay occurrence have been reported to assay between 0.20 and 0.45 ounce gold per ton (6220–13 996 ppb Au), 3.9 ounces silver per ton (93 ppm Ag), 0.9 to 4.22% Cu (9000–42 200 ppm) and 0.5 to 1.0% Ni (5000–10 000 ppm) (Parker 1989).

This area was available for staking as of January 2005.

12. South of Froghead Bay (Eagle Lake) area — Cu, ±Ag, ±REEs

Sites: 406, 459, 461, 569

This anomalous area located northwest of Osbourne Bay (Eagle Lake) presented elevated to anomalous Cu (55 to 89 ppm) at all 4 sites. Silver was anomalous at sites 459 (0.26 ppm Ag) and 461 (0.2 ppm Ag) located on the same lake.

The area is underlain by felsic intrusive rocks of the Froghead Bay stock.

As of January 2005, this area was available for staking.

13. East of Ghost Lake area (Brownridge Township) — ±Pd, ±Au, Cu, Cd

Sites: 57, 58

Site 58 features both the highest Pd (11.9 ppb) and Au (20.2 ppb by FA–ICP–MS) in the survey. Both sites 57 and 58 returned anomalous Cu (77 ppm and 97 ppm, respectively).

The bedrock in this area is composed of pillowed and massive mafic metavolcanic rocks together with medium-grained basalt and/or gabbro (Beakhouse 2001). This area has the potential for diverse mineral deposit types including gold hosted in felsic-volcanic-sediment assemblages, veins and shear zones and base metal volcanogenic massive sulphide (VMS)-type mineralization (Beakhouse 2000).

This area was not available for staking as of January 2005.

Summary and Conclusions

Preliminary interpretation of the lake sediment analytical results for the Eagle Lake area indicates the presence of 13 anomalous areas. Most of the anomalous areas are multi-element, multi-site anomalies, many of which are considered significant targets for further exploration activities. Some single-element and/or single-site anomalies may also warrant further investigation, particularly if they are located in regions of favourable geology or known mineral occurrences. The treatment of available data in this report is not considered to be exhaustive and the reader is encouraged to carry out further investigations.

Acknowledgments

The author would like to thank Richard Dyer for his exceptional guidance and direction in the writing of this report. Thanks are also extended to Dan Russell who also carried out the field work for this project and Jonathan Munn for his eager assistance, which is very much appreciated.

References

Barnett, P.J. 1992. Quaternary geology of Ontario; *in* Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part 2, p.1011-1088.

Barnett, P.J., Henry, A.P. and Babuin, D. 1991. Quaternary geology of Ontario, east-central sheet; Ontario Geological Survey, Map 2555, scale 1:1 000 000.

Beakhouse, G.P. 2000. Precambrian geology of the Wabigoon area; *in* Summary of Field Work and Other Activities 2000, Ontario Geological Survey, Open File Report 6032, p.20-1 to 20-8.

——— 2001. Precambrian geology of the Wabigoon area; *in* Summary of Field Work and Other Activities 2001, Ontario Geological Survey, Open File Report 6070, p.15-1 to 15-6.

Berger, B.R. 1990. Precambrian geology, Laval and Hartman townships; Ontario Geological Survey, Report 272, 74p.

Blackburn, C.E. 1981. Kenora–Fort Frances, Geological Compilation Series, Kenora and Rainy River districts; Ontario Geological Survey, Map 2443, scale 1:253 440.

Blackburn, C.E., Johns, G.W., Ayer, J. and Davis, D.W. 1991. Wabigoon Subprovince; *in* Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part 1, p.303-381.

Breaks, F.W. and Kuehner, S. 1984. Precambrian geology of the Eagle River–Ghost Lake area, Kenora District; Ontario Geological Survey, Preliminary Map P.2623, scale 1:31 680.

Breaks, F.W., Selway, J.B. and Tindle, A.G. 2001. Fertile peraluminous granites and related rare-element pegmatite mineralization, Superior province, northwest and northeast Ontario; *in* Summary of Field Work and Other Activities 2001, Ontario Geological Survey, Open File Report 6032, p.39-1 to 39-39.

Dyer, R.D. 1998. Garden Lake–Obonga Lake high density regional lake sediment and water survey, northwestern Ontario; *in* Summary of Field Work and Other Activities 1998, Ontario Geological Survey, Miscellaneous Paper 169, p.262-266.

Dyer, R.D. and Russell, D.F. 2002. Lac des Iles–Black Sturgeon River area lake sediment survey: Operation Treasure Hunt; Ontario Geological Survey, Open File Report 6096, 134p.

Hornbrook, E.H. and Friske, P.W. 1989. National geochemical reconnaissance lake sediment and water data, northwestern Ontario (52F); Geological Survey of Canada, Open File 1958.

Lichtblau, A., Hinz, P., Ravnaas, C., Storey, C.C., Kosloski, L. and Raoul, A. 2004. Report of Activities 2003, Resident Geologist Program, Red Lake Regional Resident Geologist Report: Red Lake and Kenora Districts; Ontario Geological Survey, Open File Report 6127, 104p.

Lynch, J. 1990. Provisional elemental values for eight new geochemical lake sediment and stream sediment reference materials LKSD-1, LKSD-2, LKSD-3, LKSD-4, STSD-1, STSD-2, STSD-3 and STSD-4; Geostandards Newsletter, v.14, no.1, April 1990, p.153-167.

Ontario Geological Survey 1991. Bedrock geology of Ontario, west-central sheet; Ontario Geological Survey, Map 2542, scale 1:1 000 000.

——— 2002a. Mineral deposit inventory, version 2 (MDI2); Ontario Geological Survey.

——— 2002b. Perrault Falls area high density regional lake sediment geochemical survey, northwestern Ontario: Operation Treasure Hunt; Ontario Geological Survey, Open File Report 6092, 84p.

Parker, J.R. 1989. Geology, gold mineralization and property visits in the area investigated by the Dryden–Ignace economic geologist, 1984–1987; Ontario Geological Survey, Open File Report 5723, 306p.

Pryslak, A.P. 1976. Geology of the Bruin Lake–Edison Lake area, District of Kenora; Ontario Division of Mines, Geological Report 130, 61p.

Roed, M.A. 1980a. Wabigoon Lake area (NTS 52F/NE), District of Kenora; Ontario Geological Survey, Northern Ontario Engineering Geology Terrain Study 22, 16p. Accompanied by Map 5059, scale 1:100 000.

——— 1980b. Blue Lake area (NTS 52F/NW), District of Kenora; Ontario Geological Survey, Northern Ontario Engineering Geology Terrain Study 21, 14p. Accompanied by Map 5058, scale 1:100 000.

Russell, D.F. 2002. Eagle Lake area high density regional lake sediment and water survey, northwestern Ontario; *in* Summary of Field Work and Other Activities 2002, Ontario Geological Survey, Open File Report 6100, p.26-1 to 26-6.

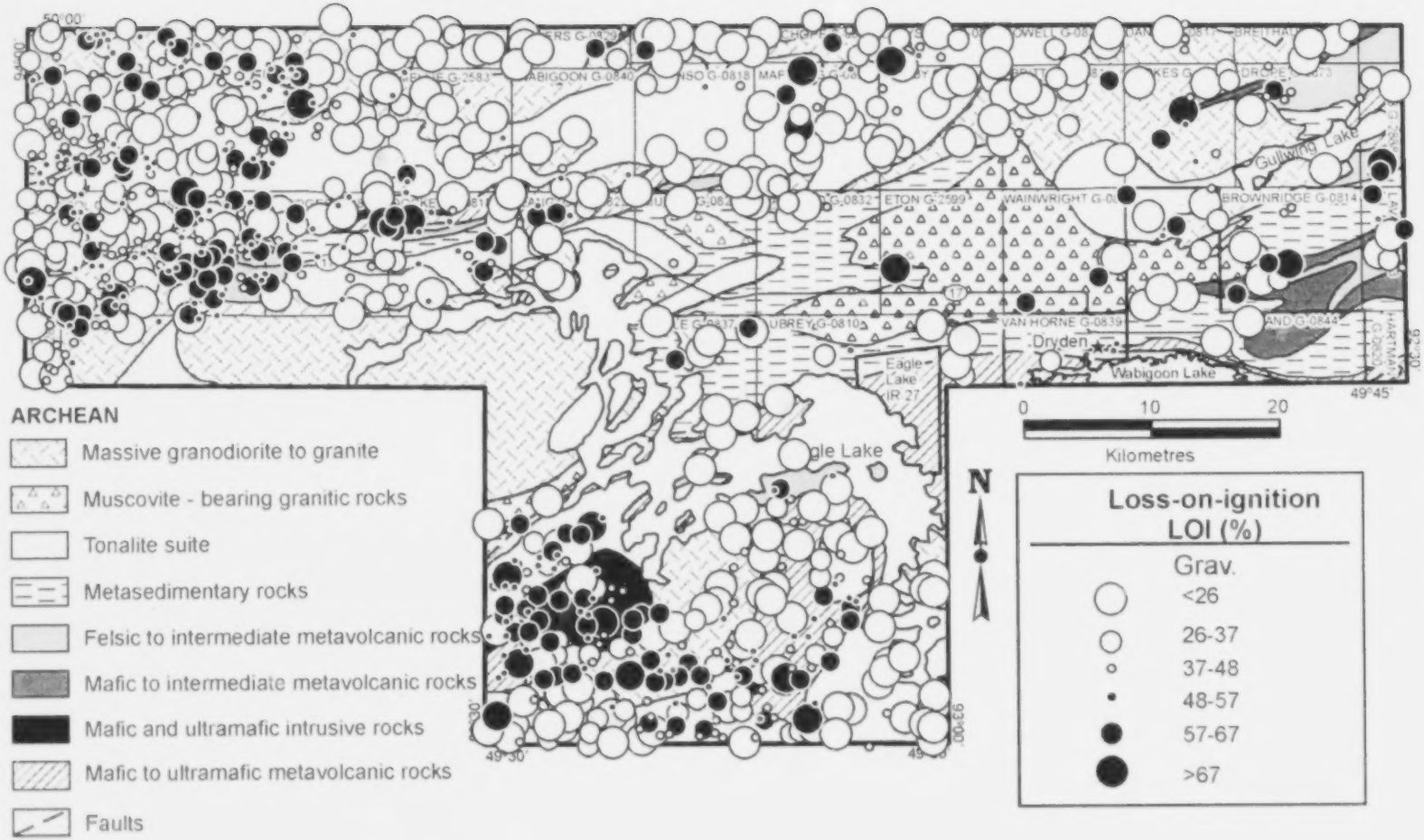
——— 2004. Sturgeon Lake–Wabigoon Lake area high density regional lake sediment and water geochemical survey, northwestern Ontario; Ontario Geological Survey, Open File Report 6125, 94p.

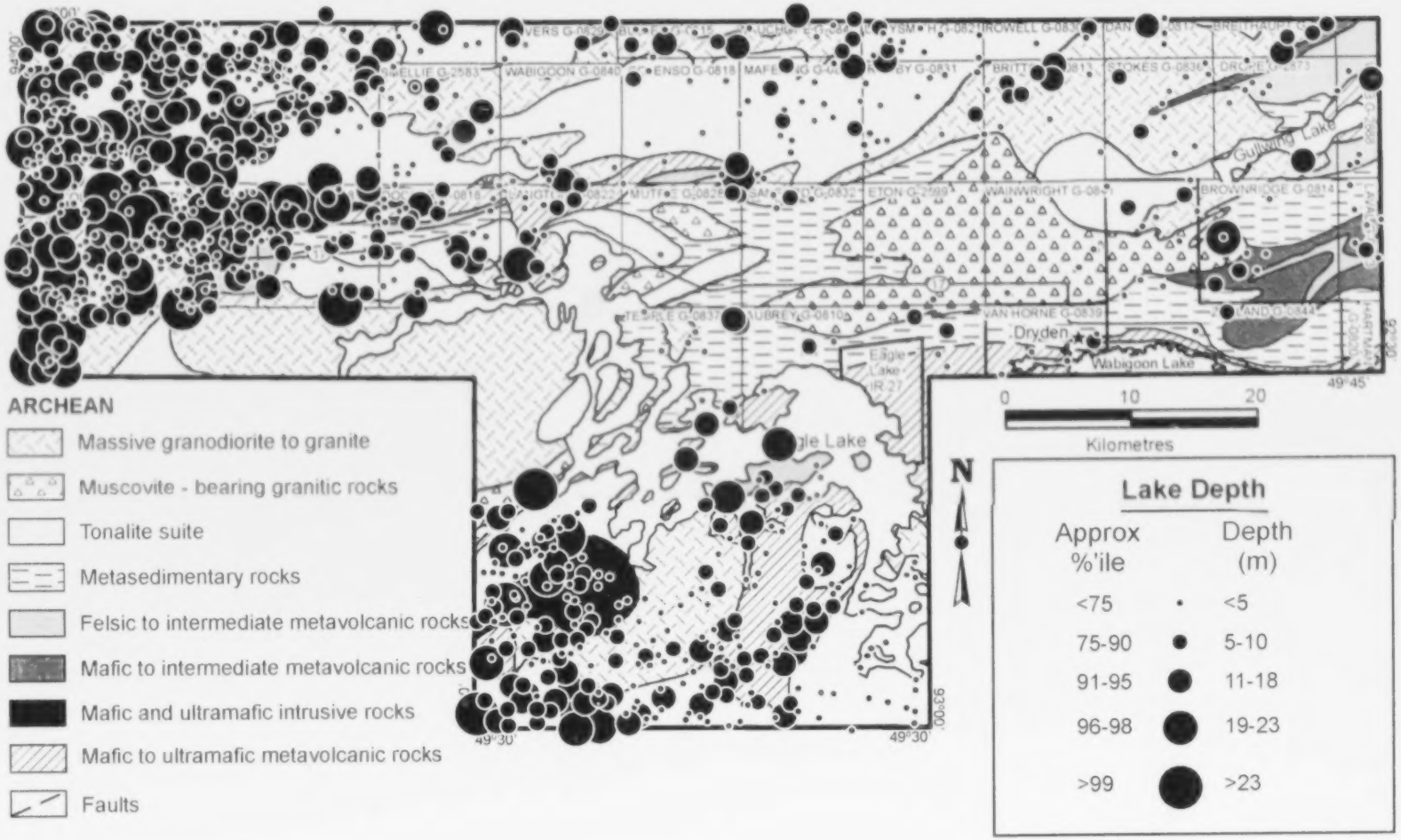
Smith, A.R. 1987. The petrology and geochemistry of the lower zone of the Mulcahy gabbro, northwestern Ontario; unpublished MSc thesis, University of Western Ontario, London, Ontario, 175p.

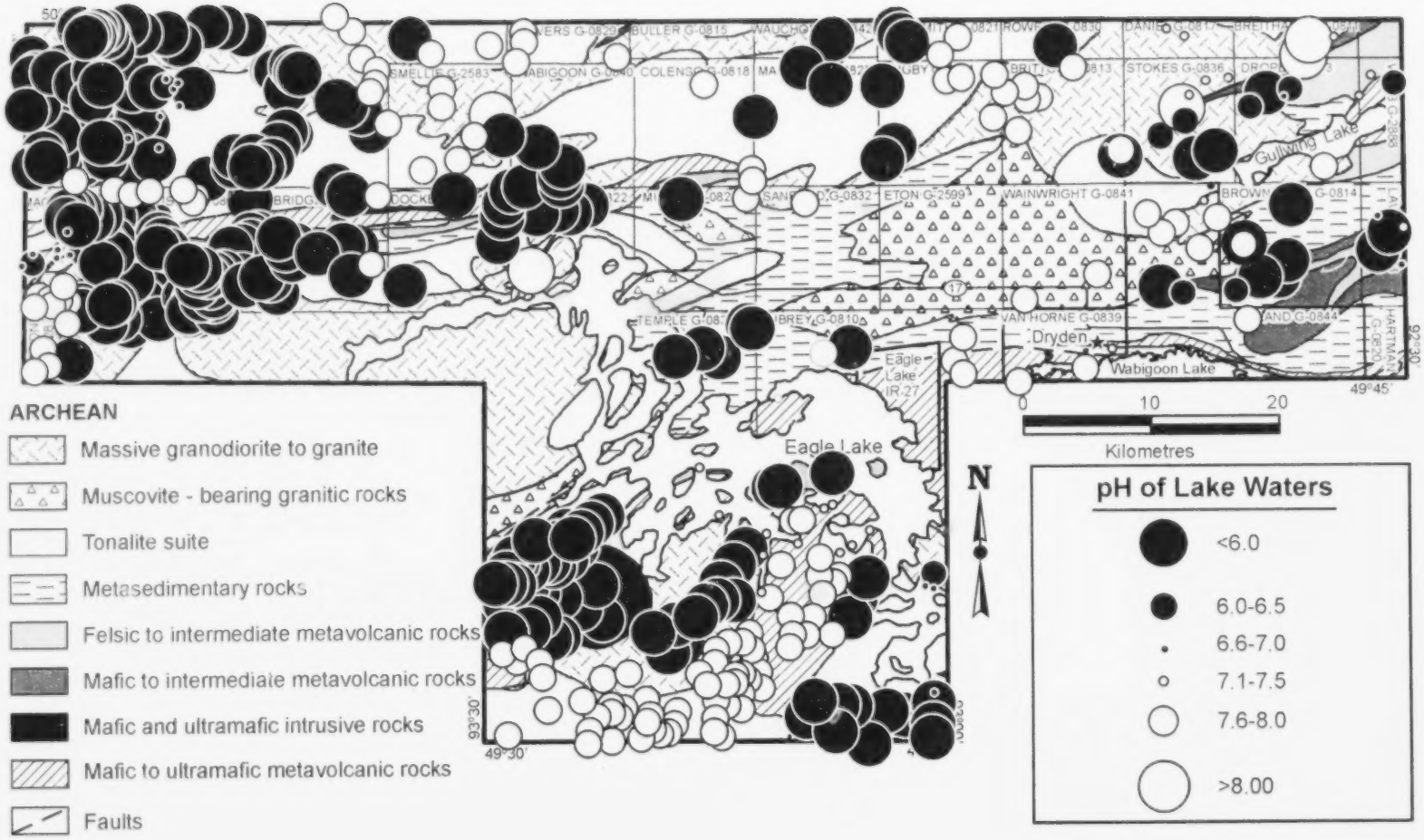
Sutcliffe, R.H. and Smith, A.R. 1985. Precambrian geology of the Mulcahy gabbro, District of Kenora; Ontario Geological Survey, Preliminary Map P.2826, scale 1:15 840.

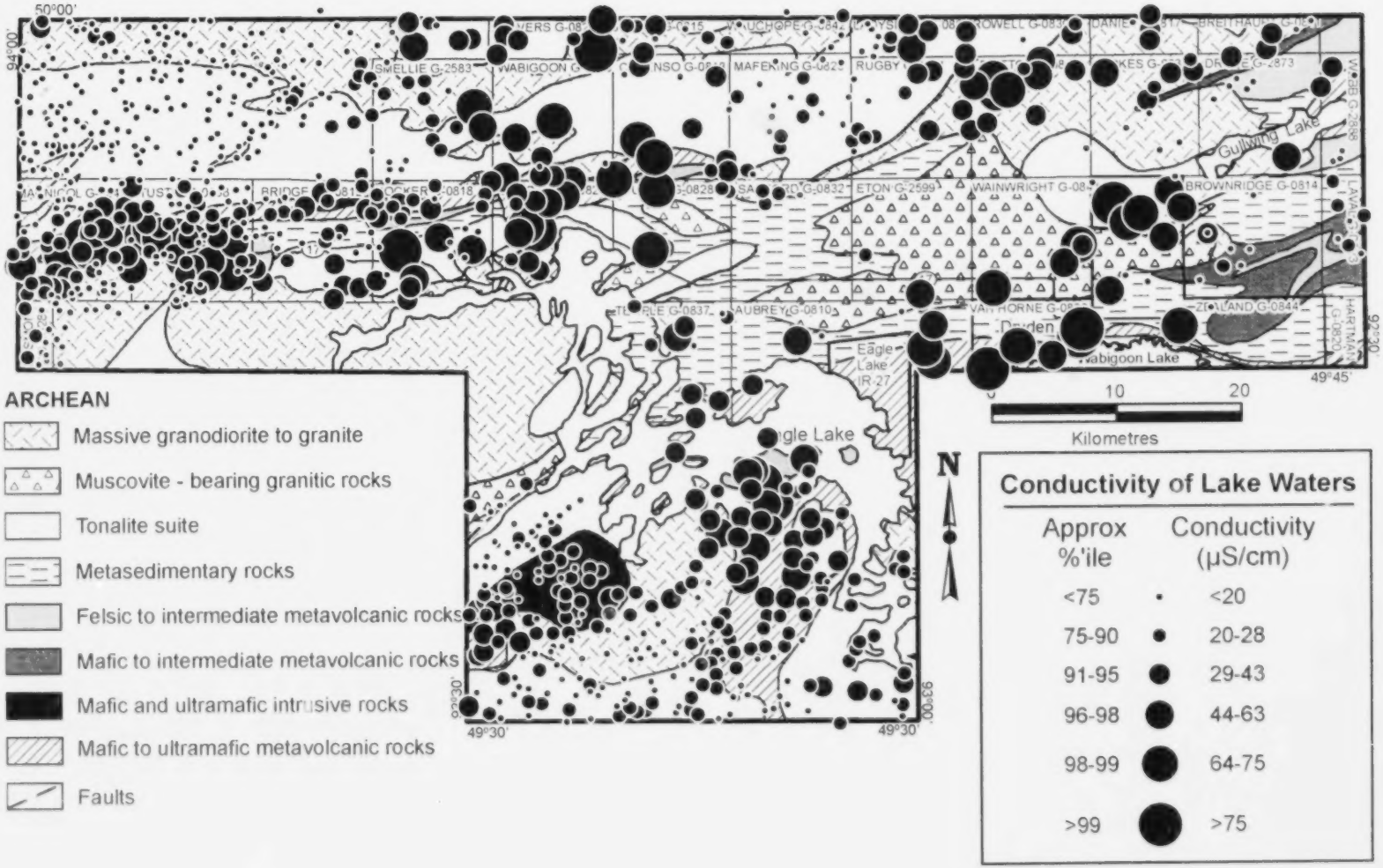
Appendix 1

Proportional Dot Maps of
Loss-on-Ignition, Lake Depth, pH and Conductivity


ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Dryden
Wabigoon Lake
Eagle Lake IR 27
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0
BROWNRIDGE G-0814
VAN HORNE G-0839
0
10
20
Kilometres
N
Loss-on-ignition
LOI (%)
Grav.
<26
26-37
37-48
48-57
57-67
>67

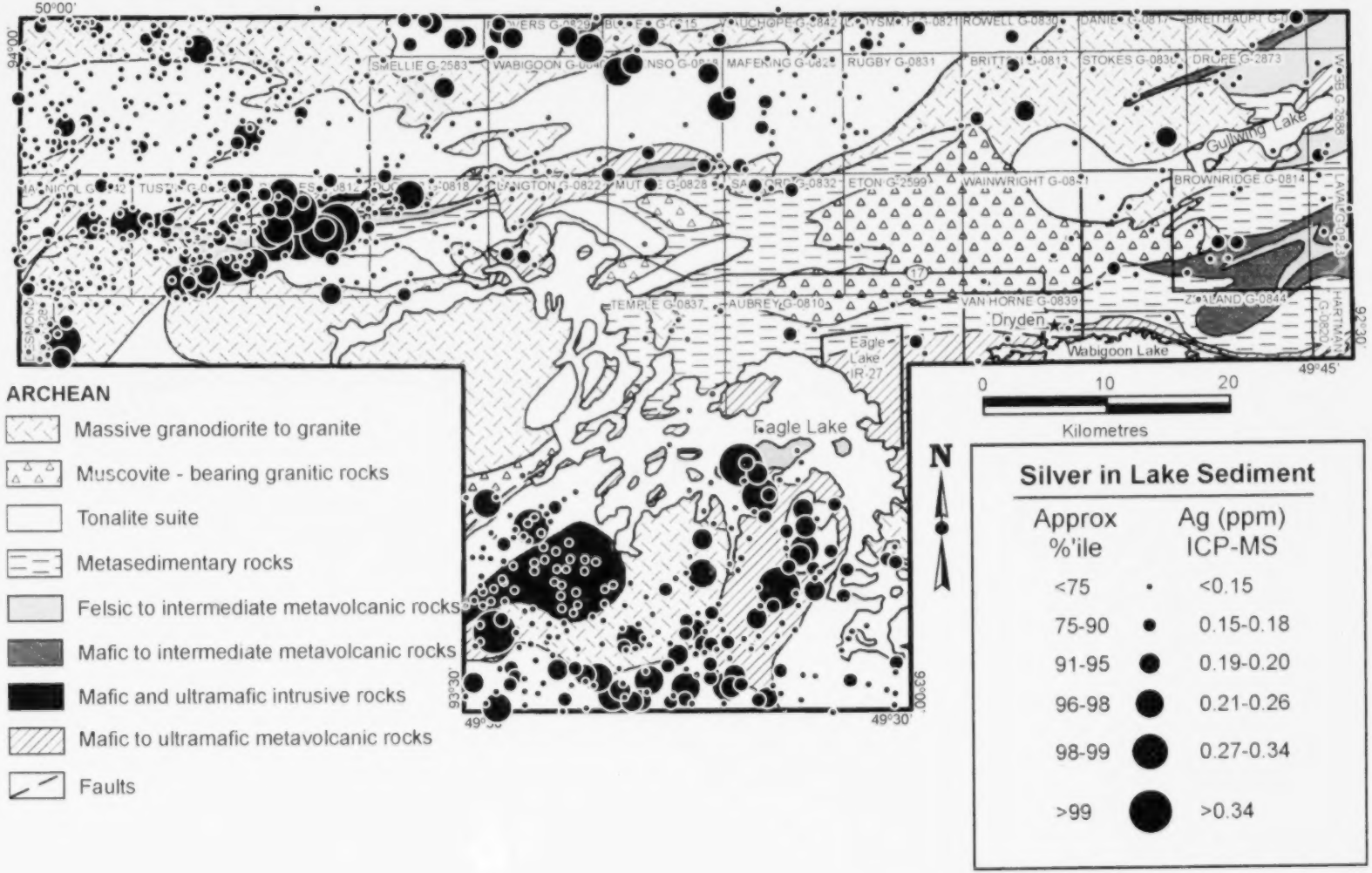

ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Gullwing Lake
Dryden
Wabigoon Lake
Eagle Lake IR 27
49°45'
49°30'
93°00'
0 10 20
Kilometres
N
Lake Depth
Approx %'ile
Depth (m)
<75 <5
75-90 5-10
91-95 11-18
96-98 19-23
>99 >23

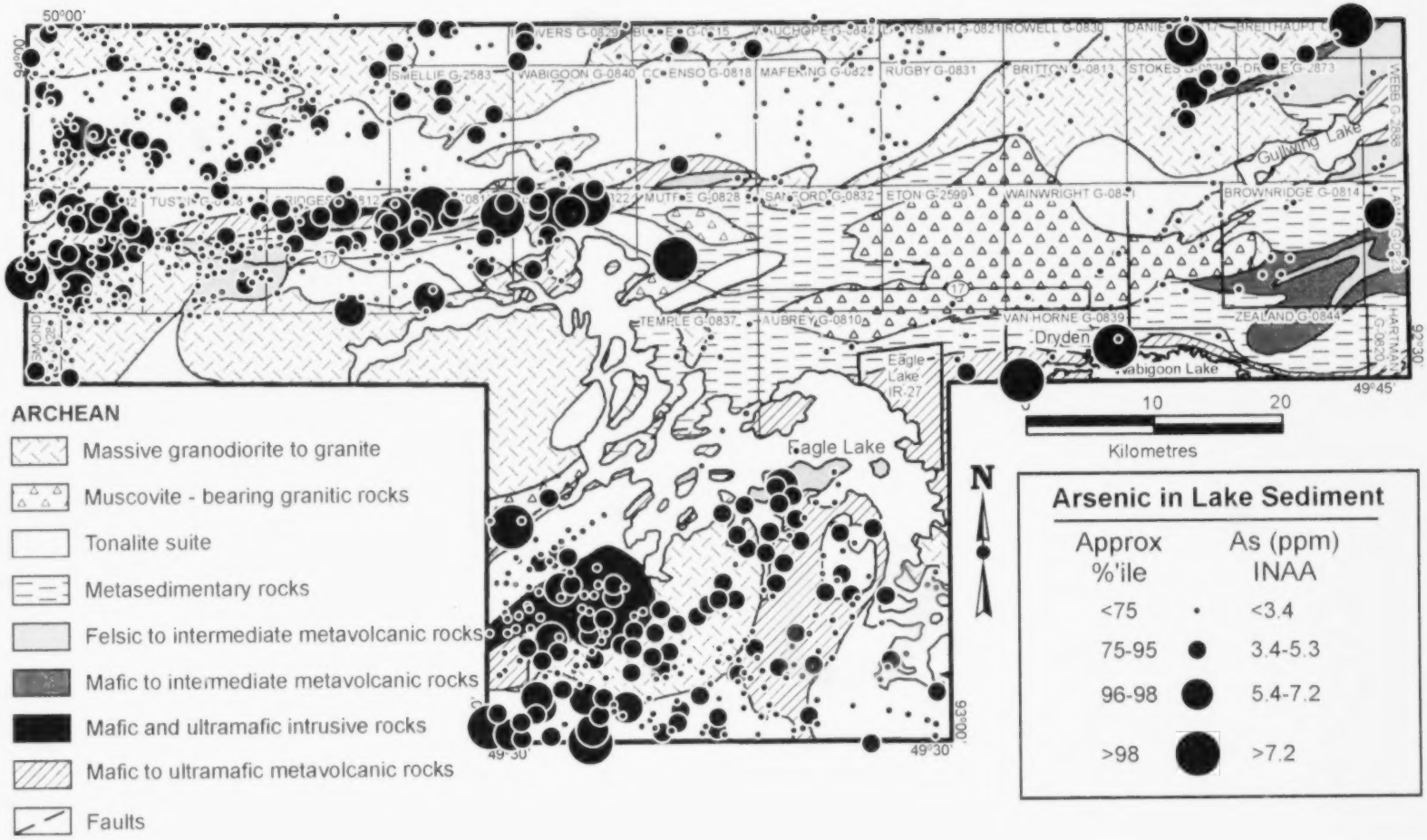

ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Eagle Lake IR 27
Eagle Lake
Dryden
Wabigoon Lake
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0841
VAN HORNE G-0839
TEMPLE G-0817
IBREY G-0810
SMELLIE G-2583
ABIGOON G-0840
COLENSO G-0818
BULLER G-0815
STOKES G-0836
BROWN G-0814
0
10
20
Kilometres
N
93°30'
49°30'
49°45'
pH of Lake Waters
<6.0
6.0-6.5
6.6-7.0
7.1-7.5
7.6-8.0
>8.00

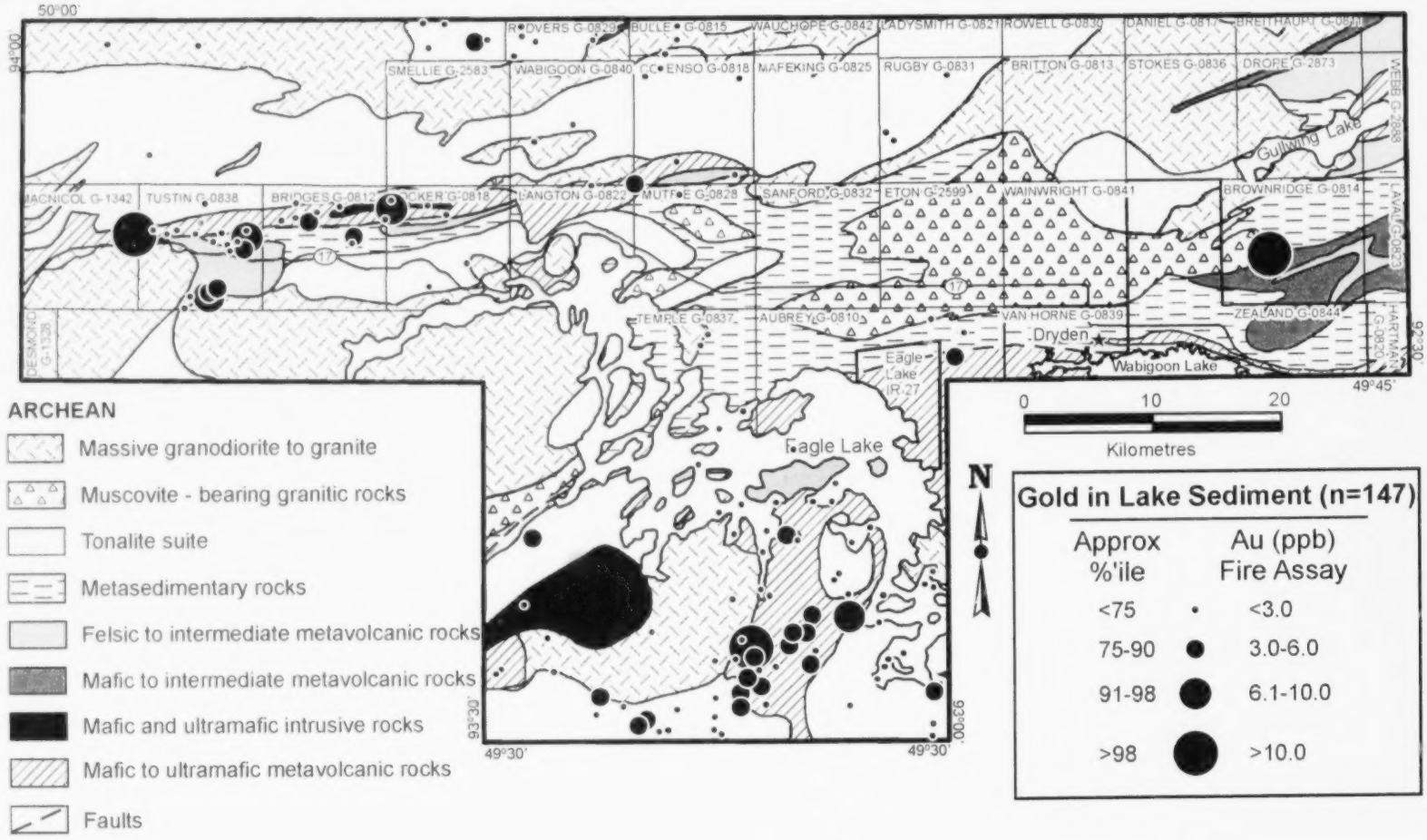

50°00'
84°00'
SMELLIE G-2583
WABIGOON G
MAFEKING G-0825
RUGBY
ROWELL G-0833
WEBB G-2888
Gullwing Lake
BRIDGE
TOWER
ETON G-2599
WAINWRIGHT G-0835
BROWNRIDGE G-0814
TERRACE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZOLLAND G-0844
HARTMAN G-0820
Eagle Lake IR 27
Wabigoon Lake
49°45'
92°30'
49°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Conductivity of Lake Waters
Approx %'ile
Conductivity (µS/cm)
<75 <20
75-90 20-28
91-95 29-43
96-98 44-63
98-99 64-75
>99 >75

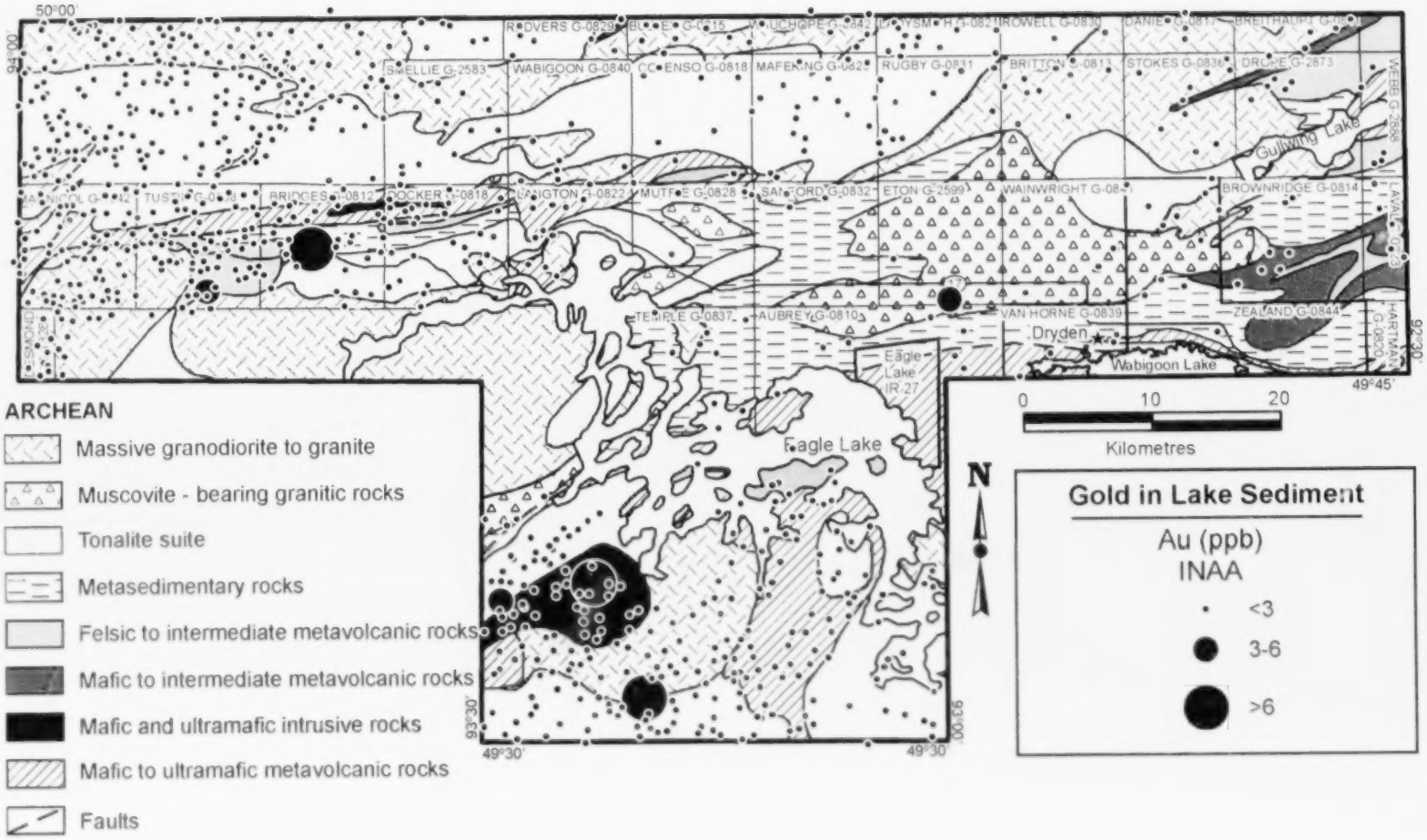
Appendix 2

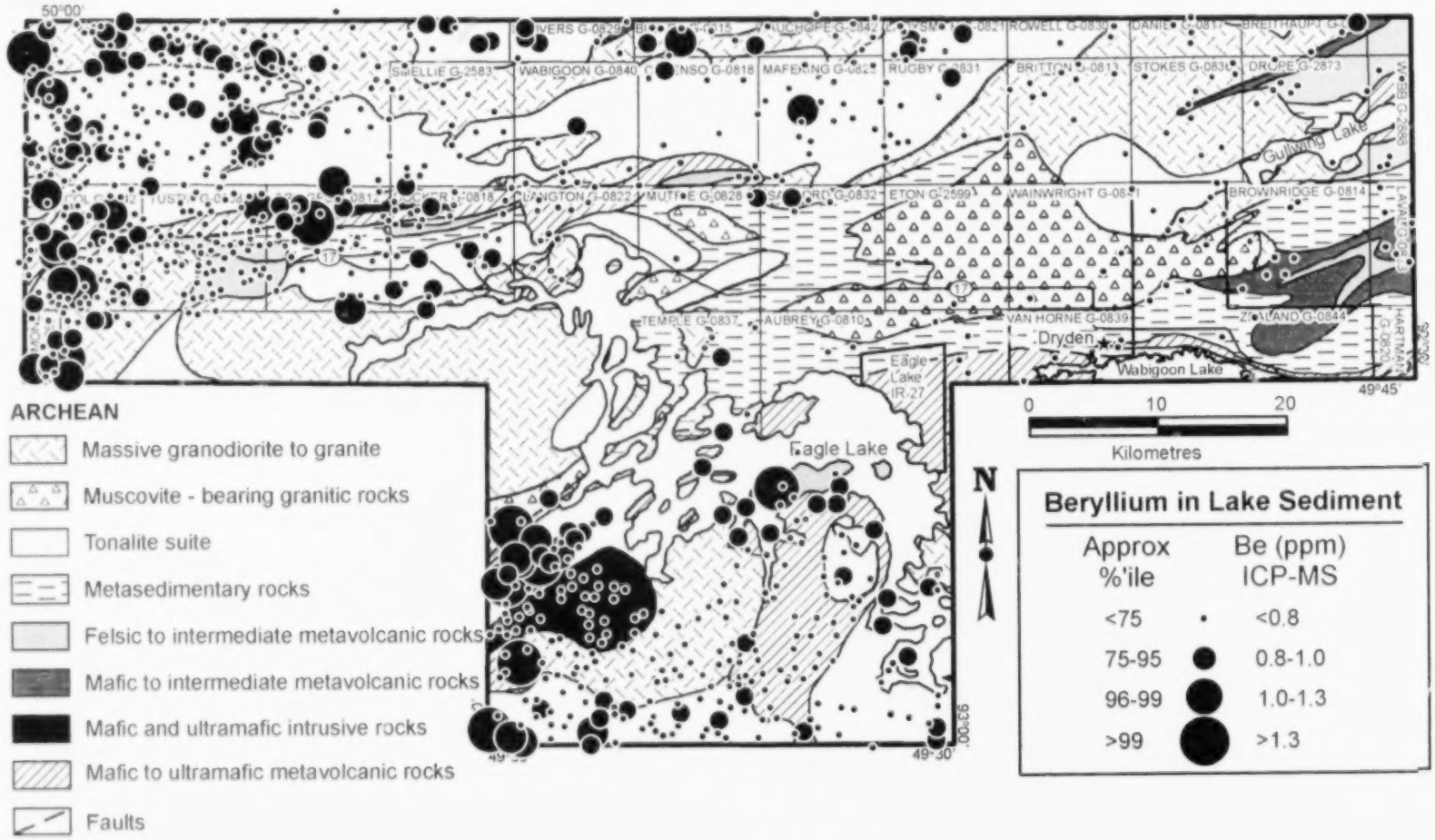
Proportional Dot Maps of Lake Sediment Geochemistry for Ag, As, Au (FA–ICP–MS and INAA), Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, Li, Mn, Mo, Nb, Ni, Pb, Pd, Pt, REEs, Sb, Th, U, V, W and Zn

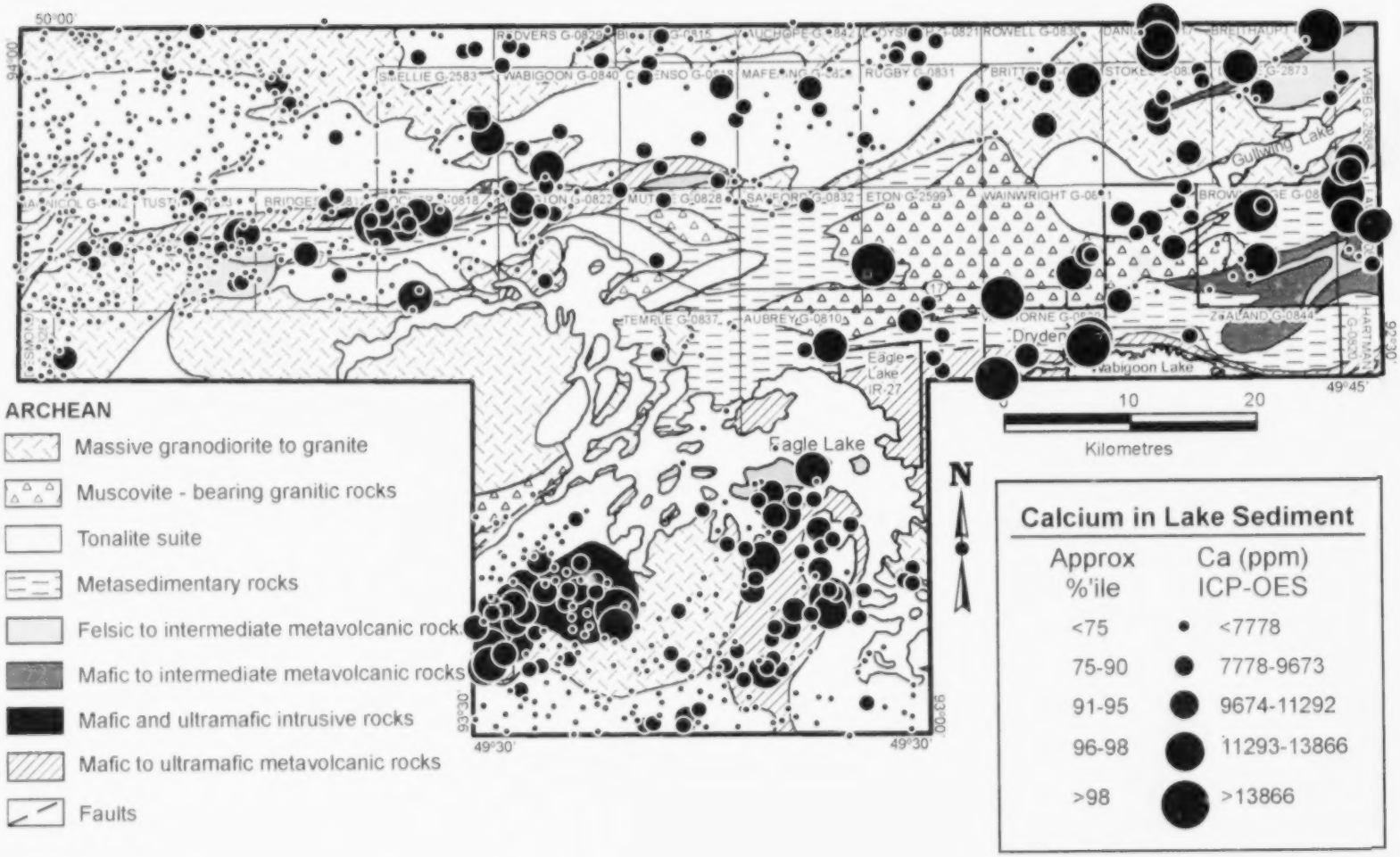

50°00'
94°00'
SMELLIE G-2583
WABIGOON G-0
MAFEKING G-0825
RUGBY G-0831
BRITT G-0813
STOKES G-0830
DRURE G-2873
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0831
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
49°45'
49°30'
93°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Silver in Lake Sediment
Approx %'ile
Ag (ppm) ICP-MS
<75 <0.15
75-90 0.15-0.18
91-95 0.19-0.20
96-98 0.21-0.26
98-99 0.27-0.34
>99 >0.34

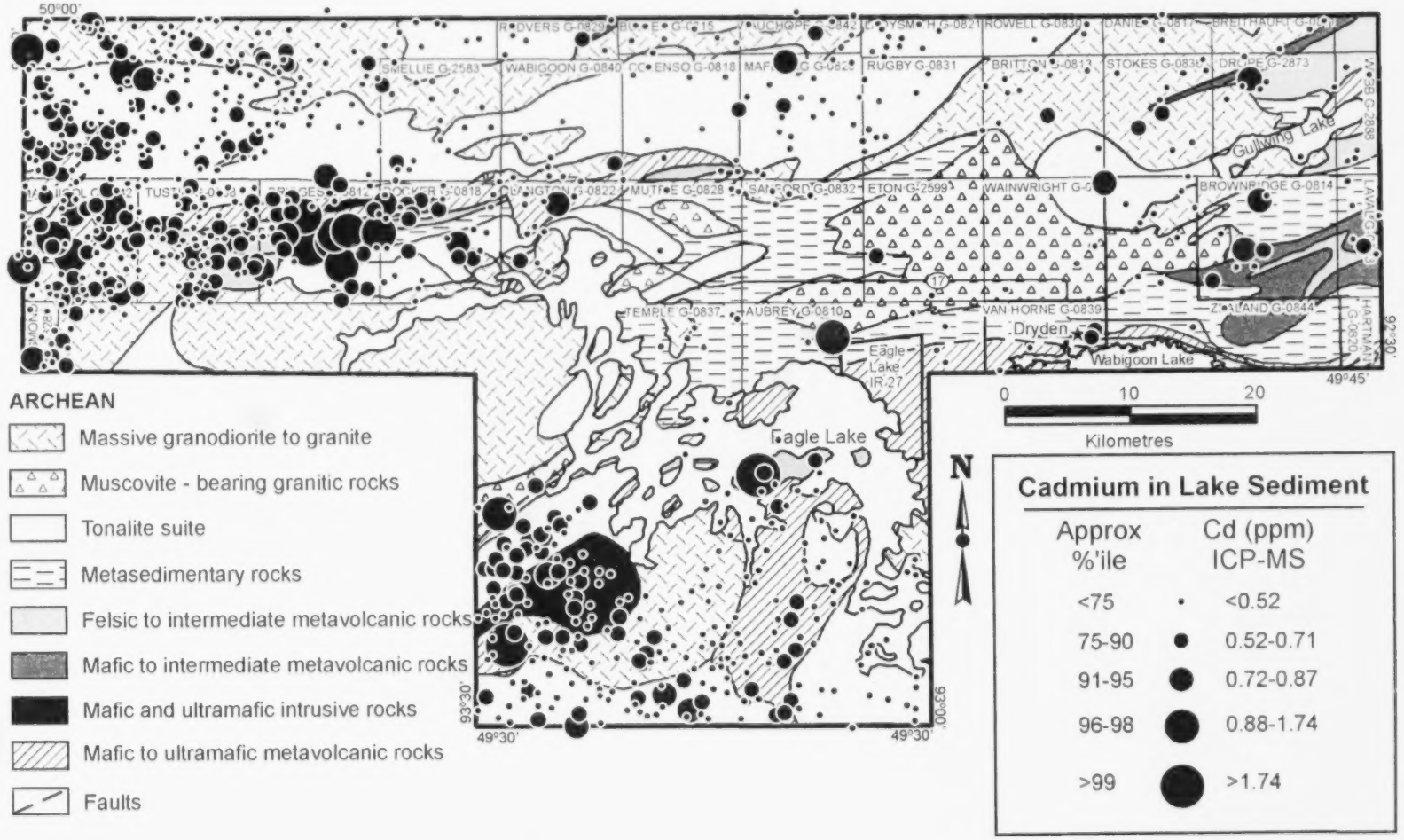

50°00'
93°00'
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0873
WEBB G-2585
Gullwing Lake
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
49°45'
49°30'
93°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Arsenic in Lake Sediment
Approx %'ile
As (ppm) INAA
<75
<3.4
75-95
3.4-5.3
96-98
5.4-7.2
>98
>7.2

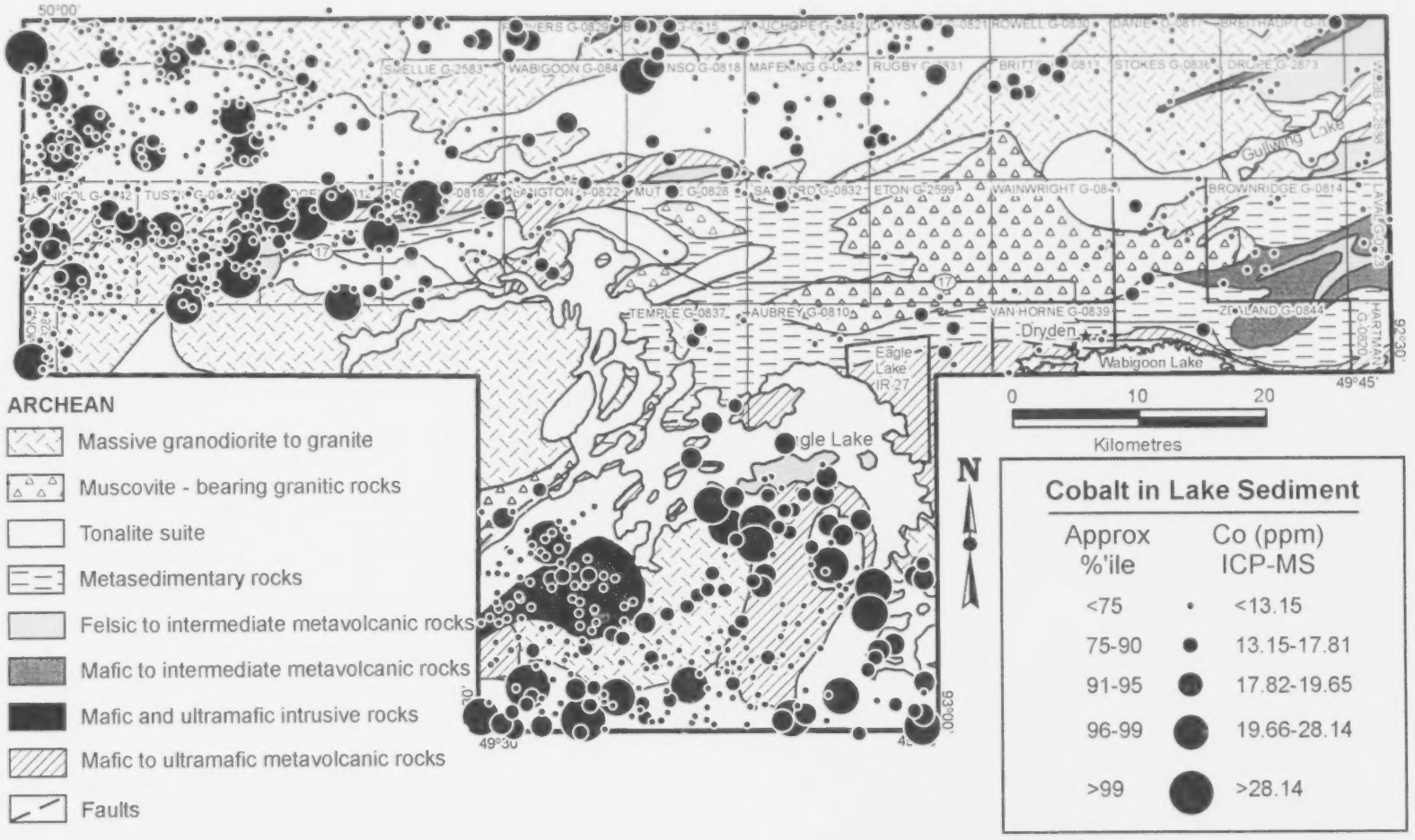

50°00'
94°00'
ROVERS G-0829
BULLE G-0815
WAUCHOPE G-0842
LADYSMITH G-0821
ROWELL G-0830
DANIEL G-0817
SMELLIE G-2583
WABIGOON G-0840
CONENSO G-0818
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2873
WEBB G-2883
Gullwing Lake
MACNICOL G-1342
TUSTIN G-0838
BRIDGES G-0812
LANGTON G-0822
MUTRIE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
LAVAL G-0823
DESMOND G-1338
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
HARTMAN G-0820
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
92°30'
49°45'
93°30'
93°00'
49°30'
49°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Gold in Lake Sediment (n=147)
Approx %'ile
Au (ppb) Fire Assay
<75
<3.0
75-90
3.0-6.0
91-98
6.1-10.0
>98
>10.0

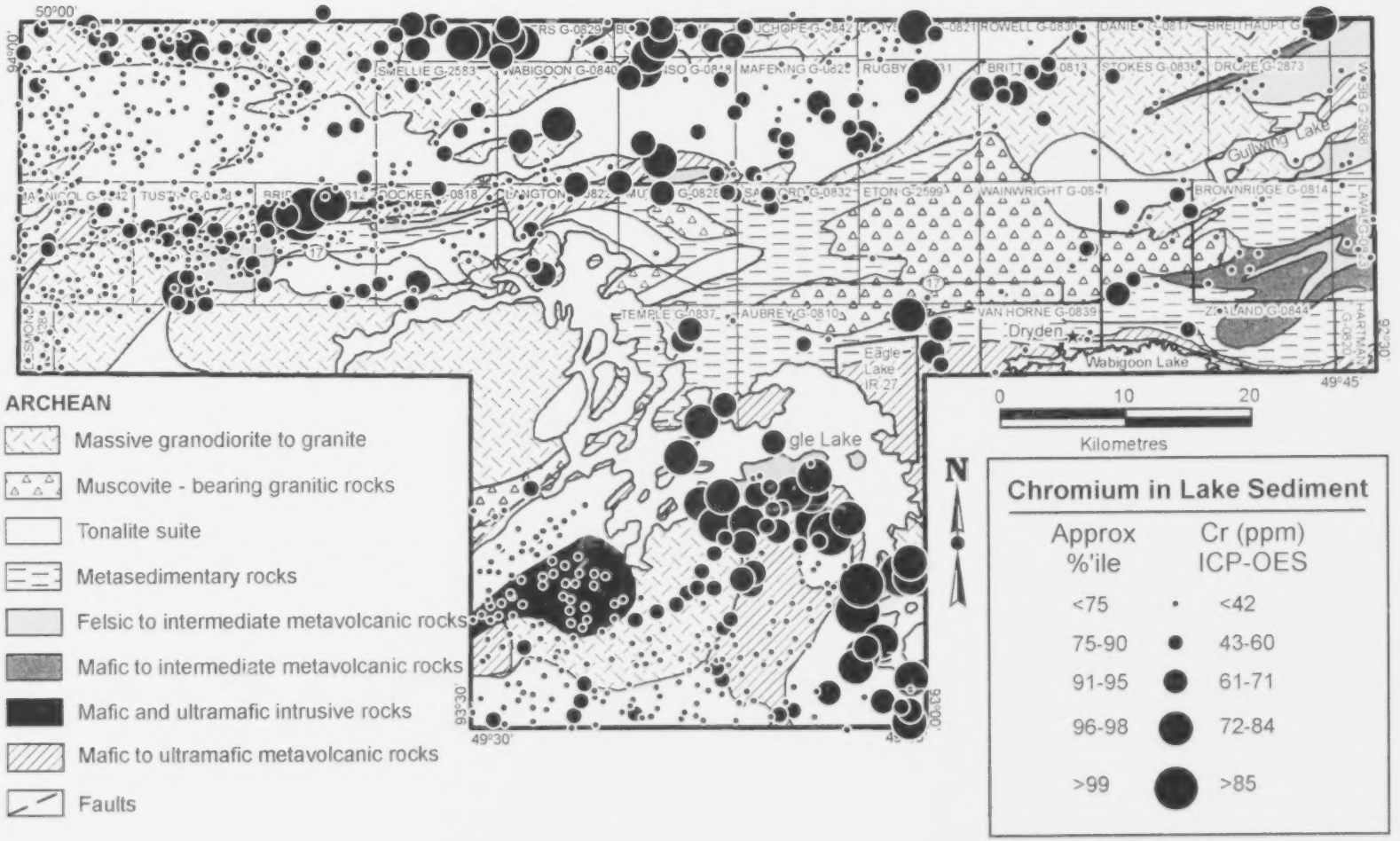

50°00'
94°00'
ROVERS G-0829
BLOSS G-0815
MUCHOPE G-0842
DAYSMITH G-0837
BROWELL G-0830
DANIEL G-0817
BREITHAUPT G-0816
SMELLIE G-2583
WABIGOON G-0840
CONSTANCE G-0818
MAFEKING G-0823
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DRONE G-2873
WEBB G-2588
Gullwing Lake
MANSFIELD G-0842
TUSTIN G-0824
BRIDGES G-0812
DOCKER G-0818
LANGTON G-0822
MUTTEE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
LAWALOCK G-0819
SMOND G-0838
TESKEY G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
HARTMAN G-0820
Dryden
Eagle Lake IR 27
Wabigoon Lake
92°30'
93°30'
93°00'
49°30'
49°45'
0
10
20
Kilometres
N
Eagle Lake
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Gold in Lake Sediment
Au (ppb)
INAA
<3
3-6
>6

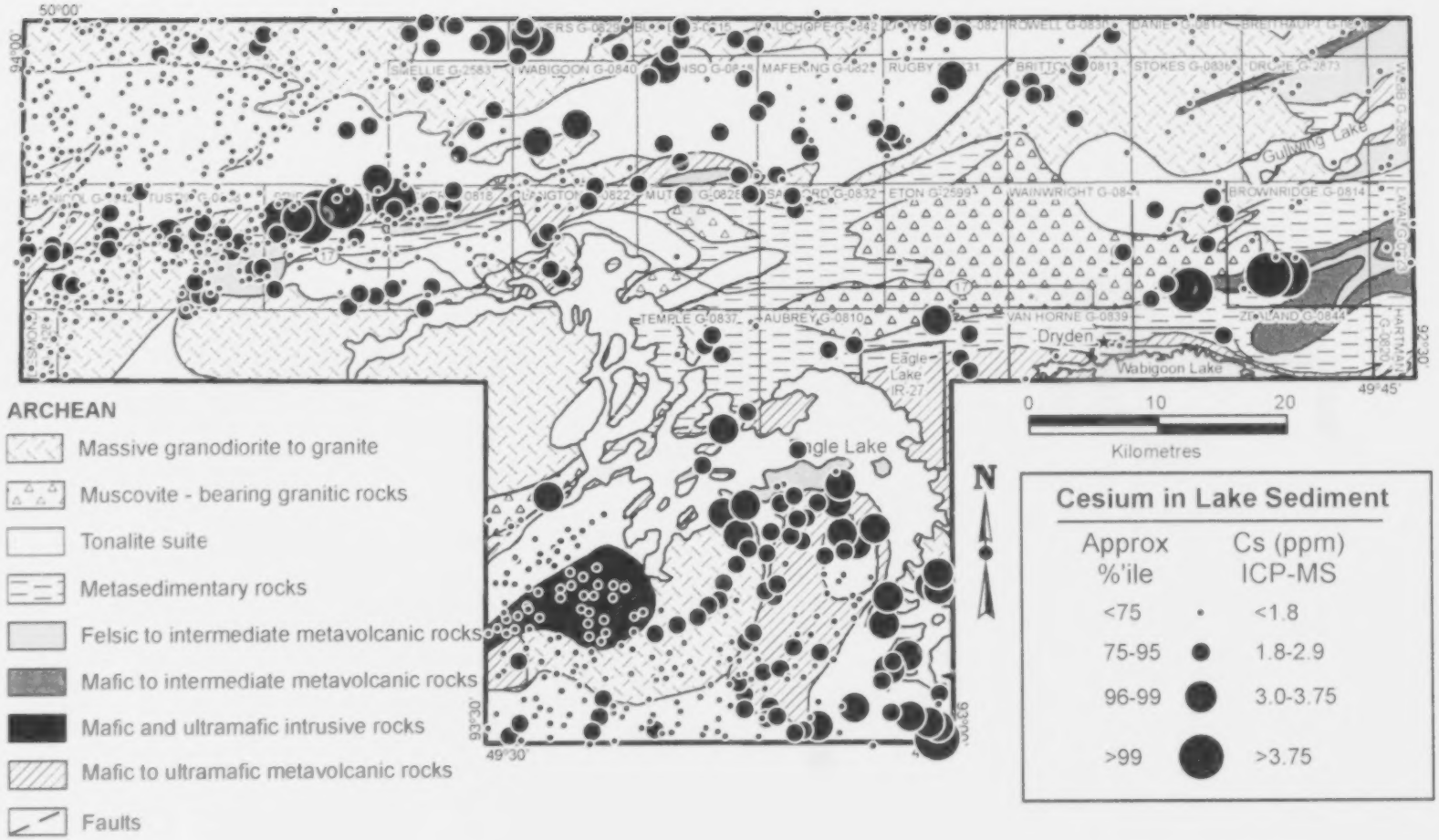

50°00'
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2873
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
49°45'
49°30'
0 10 20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Beryllium in Lake Sediment
Approx %'ile
Be (ppm) ICP-MS
<75 <0.8
75-95 0.8-1.0
96-99 1.0-1.3
>99 >1.3

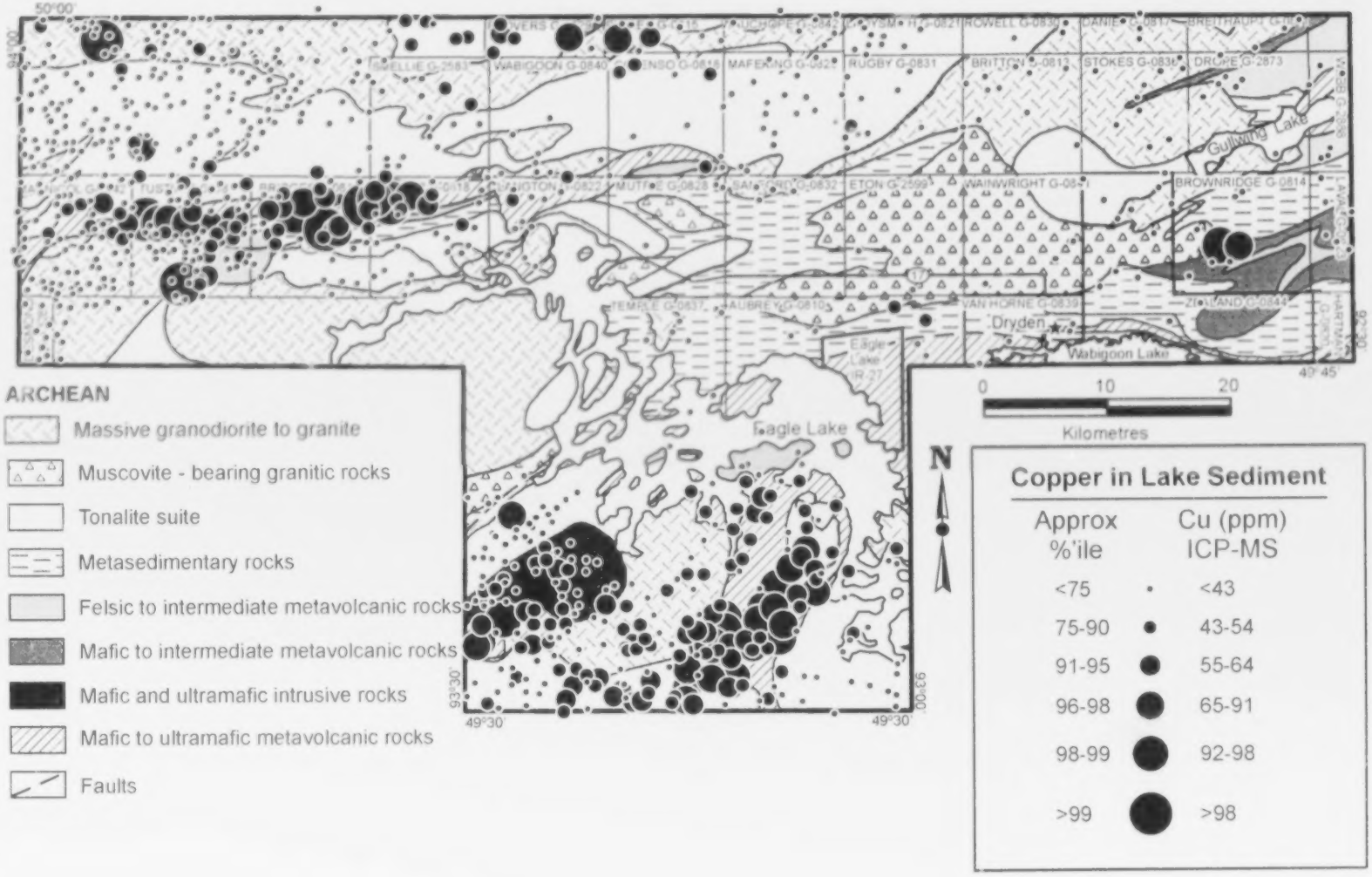

50°00'
94°00'
93°30'
49°30'
49°45'
Dryden
Wabigoon Lake
Eagle Lake
Eagle Lake IR 27
Gullwing Lake
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Calcium in Lake Sediment
Approx %'ile
Ca (ppm) ICP-OES
<75 <7778
75-90 7778-9673
91-95 9674-11292
96-98 11293-13866
>98 >13866

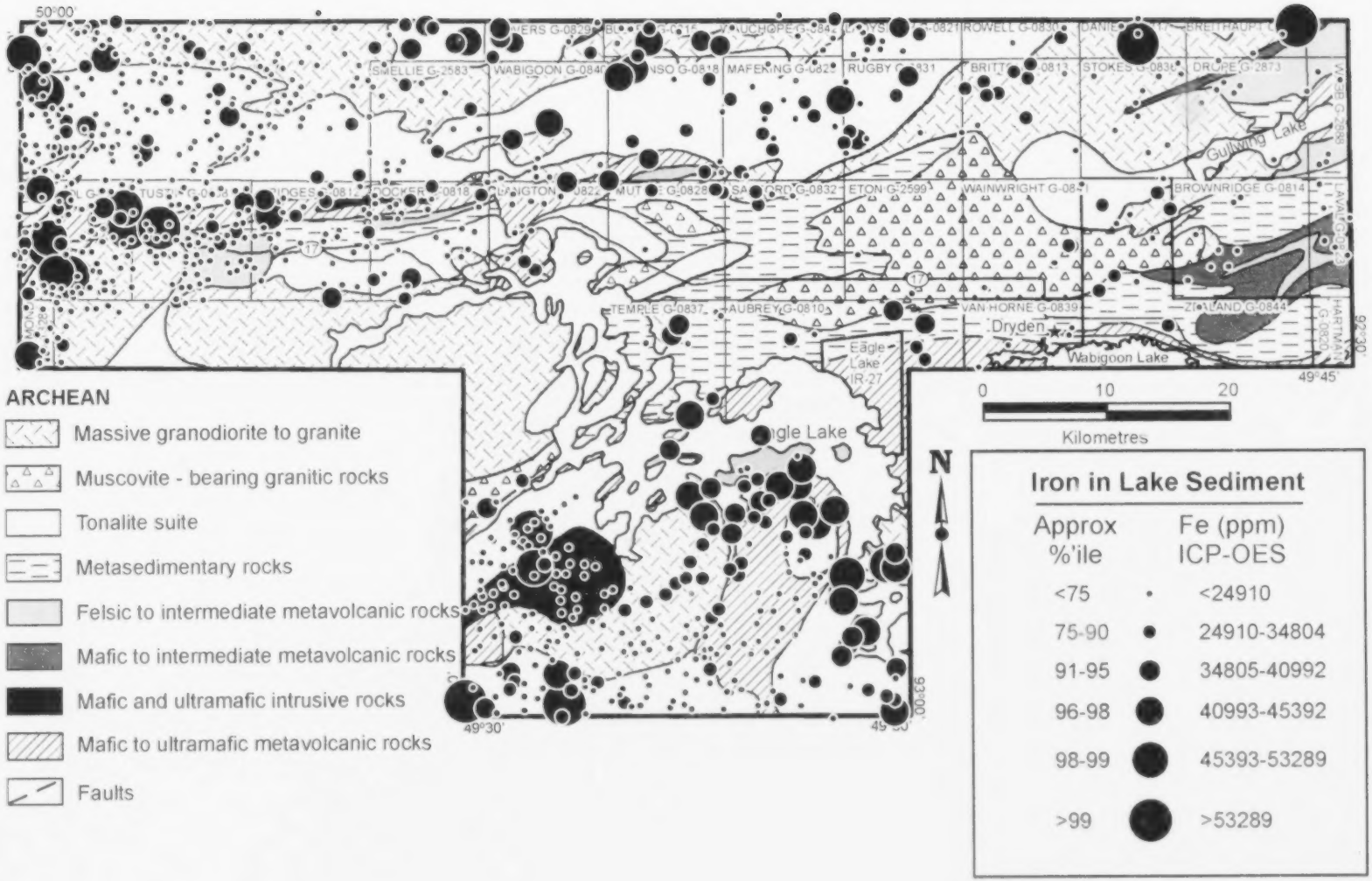

50°00'
SMELLIE G-2583
WABIGOON G-0840
RUGBY G-0831
STOKES G-0830
GULLWING LAKE
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
93°30'
49°30'
49°45'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Cadmium in Lake Sediment
Approx %'ile
Cd (ppm) ICP-MS
<75 <0.52
75-90 0.52-0.71
91-95 0.72-0.87
96-98 0.88-1.74
>99 >1.74

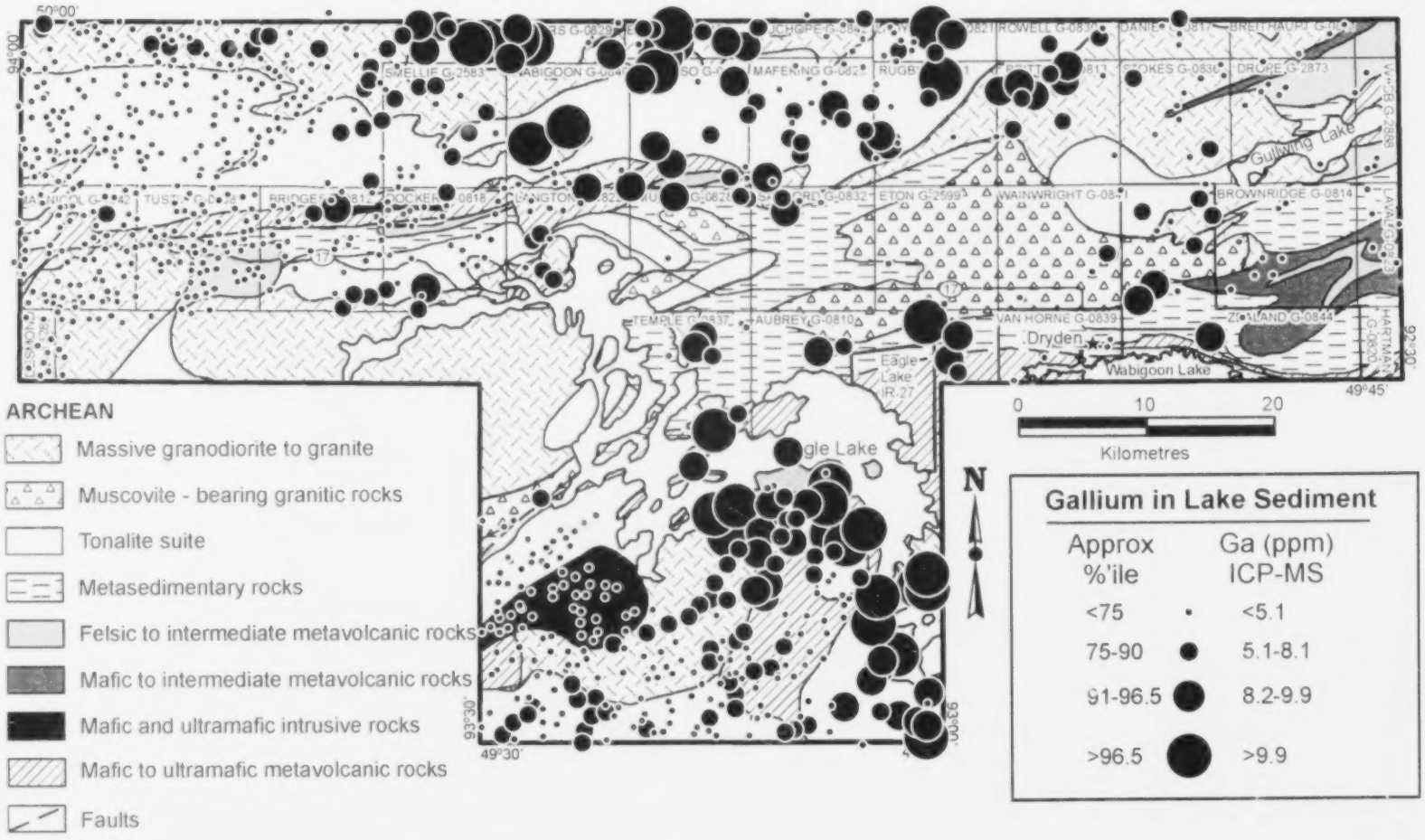

50°00'
SMELLIE G-2583
WABIGOON G-084
MAFENING G-082
RUGBY G-0831
STOKES G-0836
DRUCE G-2873
Gullwing Lake
ETON G-2599
WAINWRIGHT G-084
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
HARTMAN G-0820
Dryden
Wabigoon Lake
Eagle Lake IR 27
49°45'
92°30'
49°30'
93°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Cobalt in Lake Sediment
Approx %'ile
Co (ppm) ICP-MS
<75
<13.15
75-90
13.15-17.81
91-95
17.82-19.65
96-99
19.66-28.14
>99
>28.14

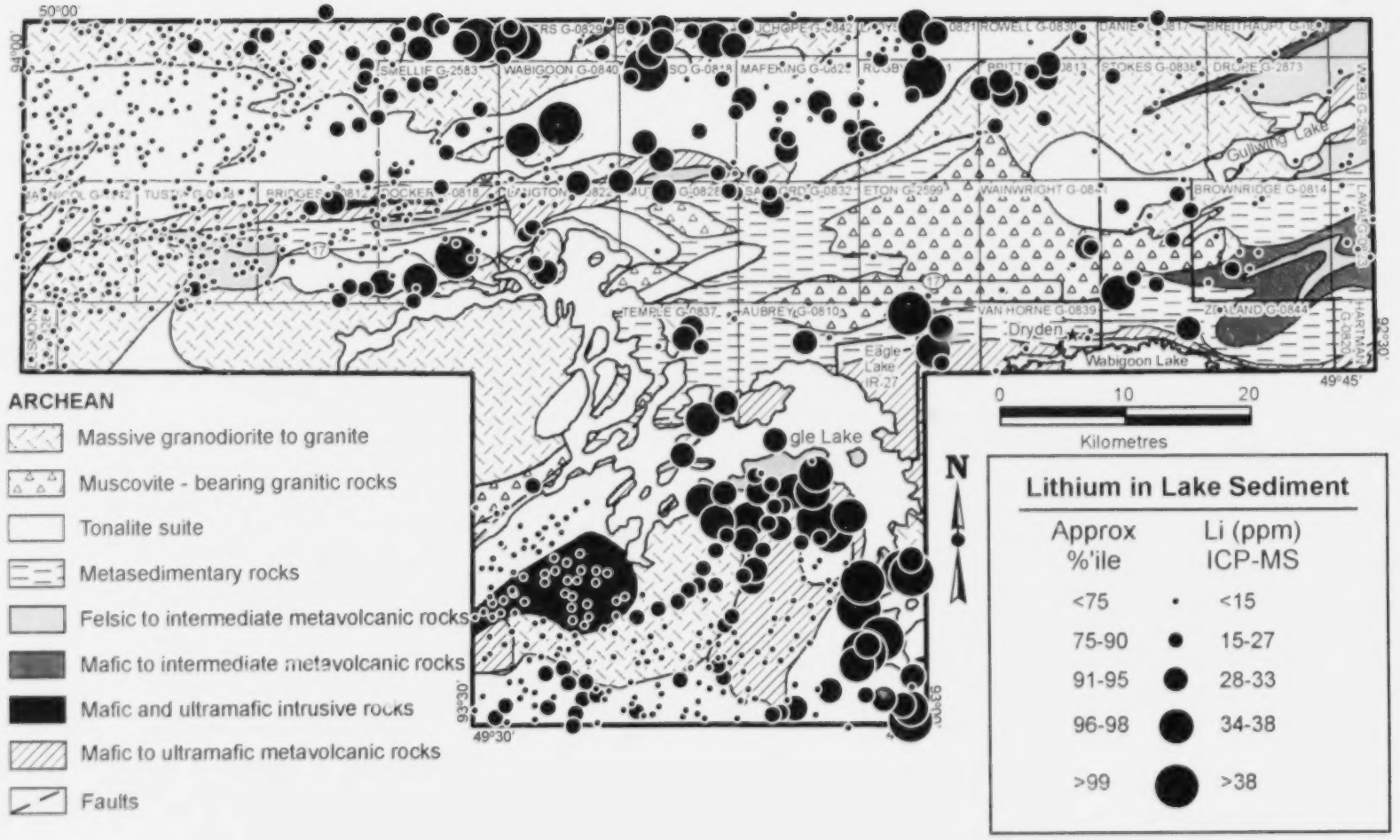

50°00'
94°00'
93°30'
49°45'
49°30'
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
RUGBY
BRITT
STOKES G-0836
DRUPE G-2873
Gullwing Lake
ROWELL G-0834
BRETHAUPT
TEMPLE G-0837
AUBREY G-0810
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
VAN HORNE G-0839
ZEELAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Chromium in Lake Sediment
Approx %'ile
Cr (ppm) ICP-OES
<75
<42
75-90
43-60
91-95
61-71
96-98
72-84
>99
>85

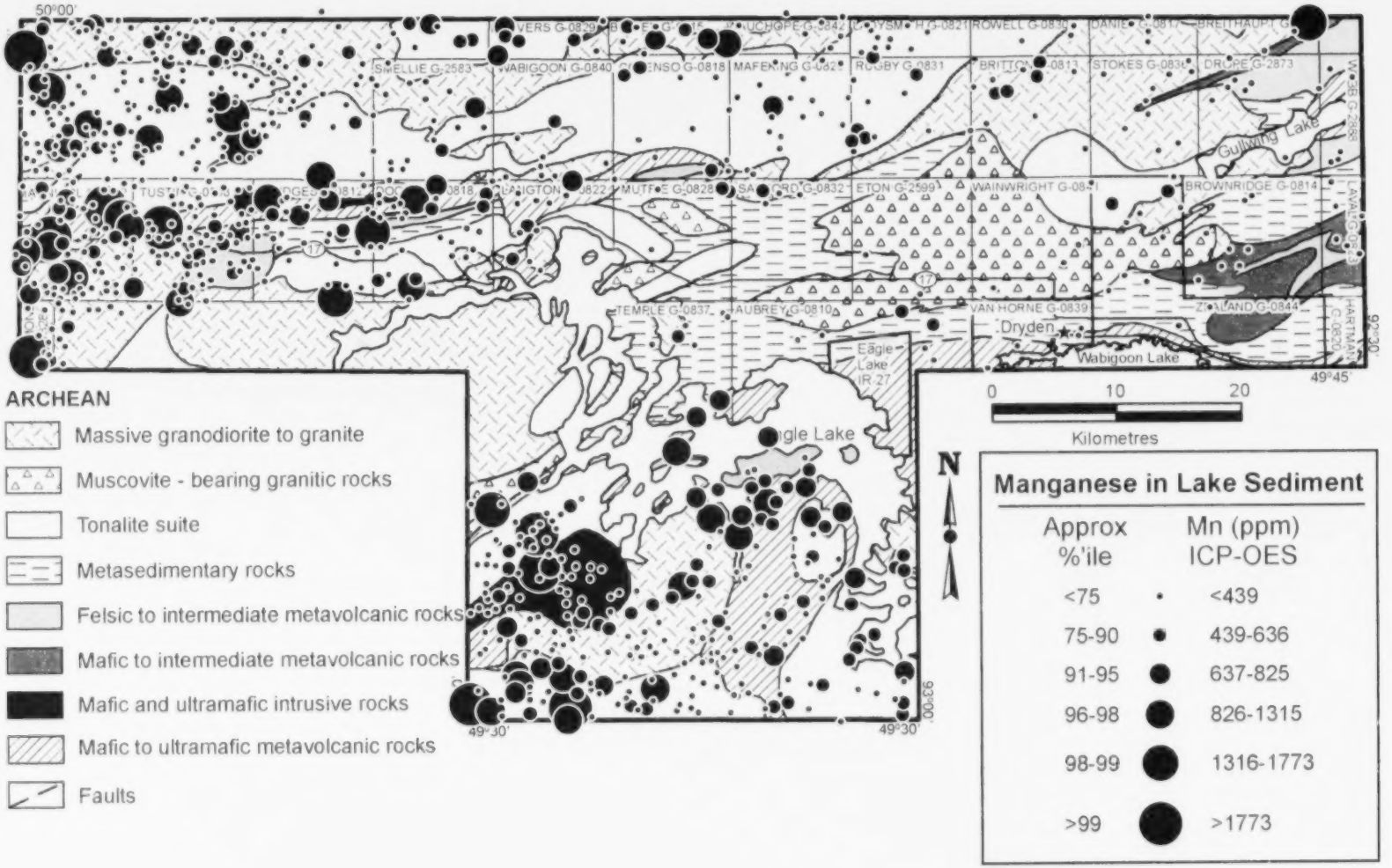

50°00'
94°00'
93°30'
49°30'
49°45'
WABIGOON G-0840
MAFEKING G-0822
RUGBY
BRITTON
STOKES G-0836
DRODE G-2873
GULLING LAKE
ETON G-2599
WAINWRIGHT G-084
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZIONLAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Cesium in Lake Sediment
Approx %'ile
Cs (ppm) ICP-MS
<75
<1.8
75-95
1.8-2.9
96-99
3.0-3.75
>99
>3.75

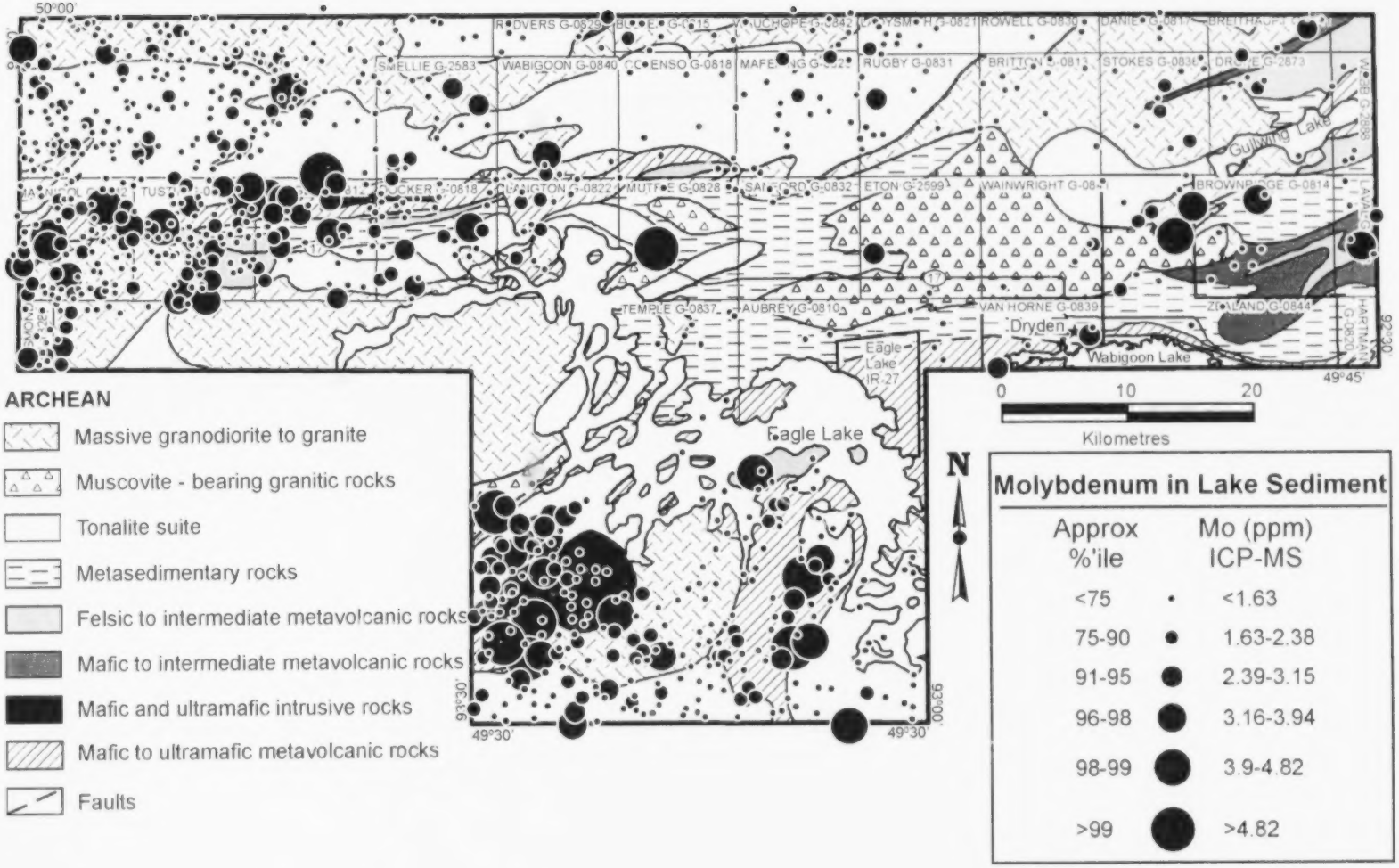

50°00'
49°45'
93°30'
93°00'
49°30'
49°30'
WABIGOON G-0840
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0812
STOKES G-0836
DRUCE G-2873
WAINWRIGHT G-0851
BROWNRIDGE G-0814
ETON G-2599
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEMAND G-0844
Gulliver Lake
Dryden
Wabigoon Lake
Eagle Lake
Eagle Lake R.27
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Copper in Lake Sediment
Approx %'ile
Cu (ppm) ICP-MS
<75 <43
75-90 43-54
91-95 55-64
96-98 65-91
98-99 92-98
>99 >98

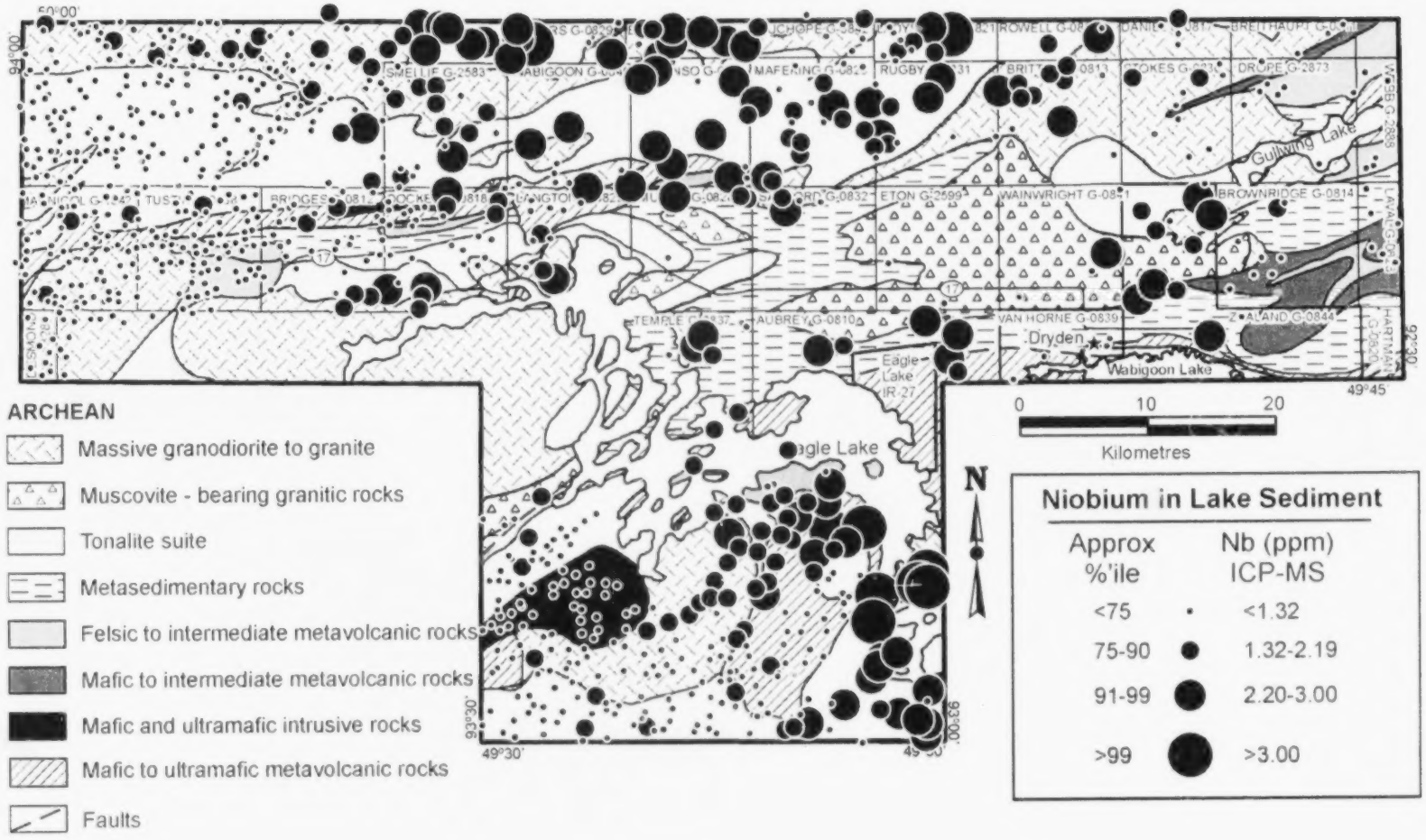

50°00'
49°30'
49°45'
93°30'
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
RUGBY G-0831
BRITT G-0813
STOKES G-0830
DRAPE G-2873
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEELAND G-0844
HARTMAN G-0800
Dryden
Wabigoon Lake
Eagle Lake
IR-27
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Iron in Lake Sediment
Approx %'ile
Fe (ppm) ICP-OES
<75 <24910
75-90 24910-34804
91-95 34805-40992
96-98 40993-45392
98-99 45393-53289
>99 >53289

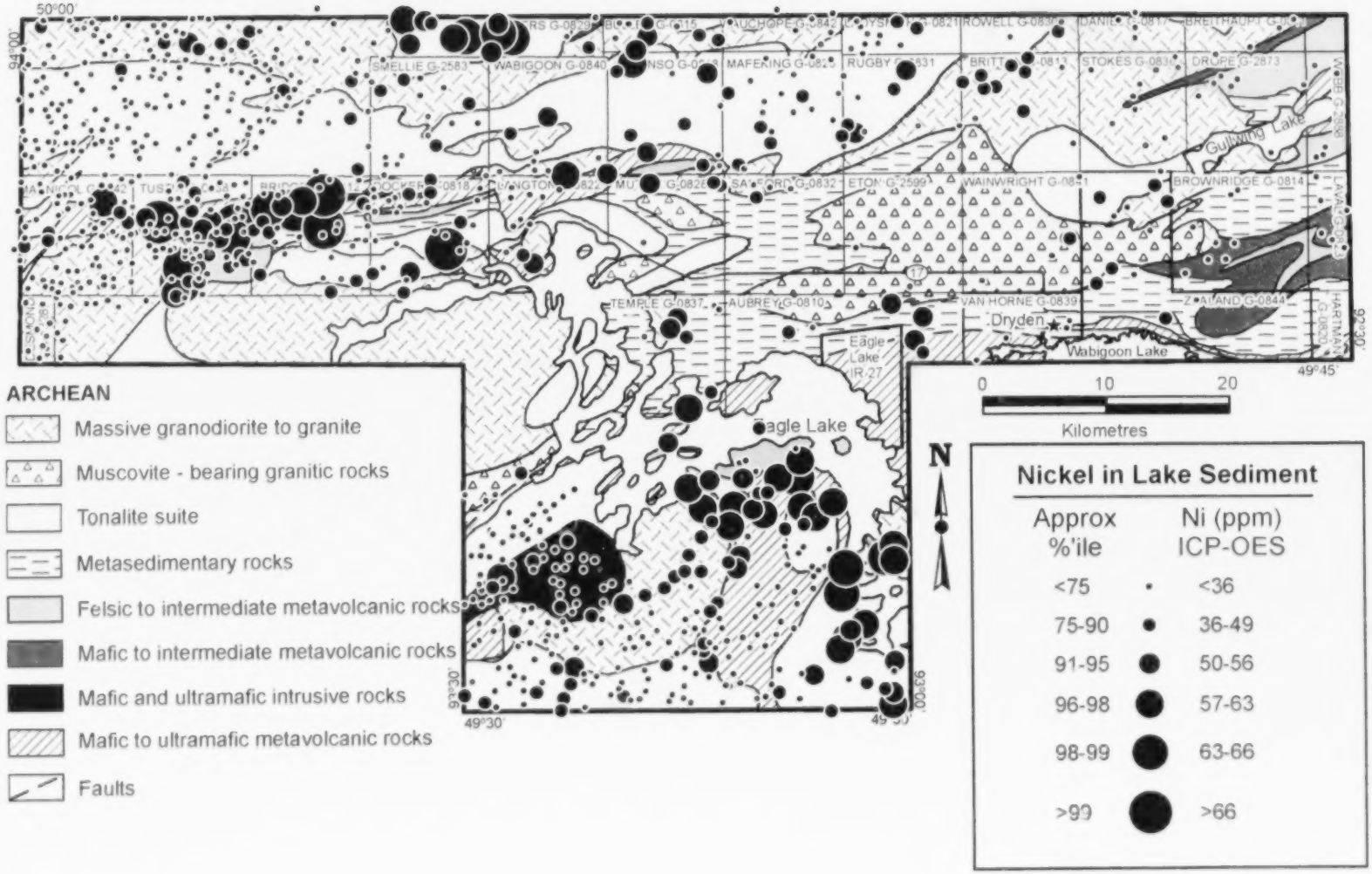

50°00'
94°00'
93°30'
49°30'
49°45'
SMELLIE G-2583
ABIGOON G-0
MAFEKING G-0825
RUGBY
ROWELL G-0837
DANIEL
BRETHAUPT G-0811
STOKES G-0830
DRUPE G-2873
Gullwing Lake
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZIELAND G-0844
HARTMAN G-0820
Dryden
Wabigoon Lake
Eagle Lake IR 27
gle Lake
N
0
10
20
Kilometres
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Gallium in Lake Sediment
Approx %'ile
Ga (ppm) ICP-MS
<75
<5.1
75-90
5.1-8.1
91-96.5
8.2-9.9
>96.5
>9.9

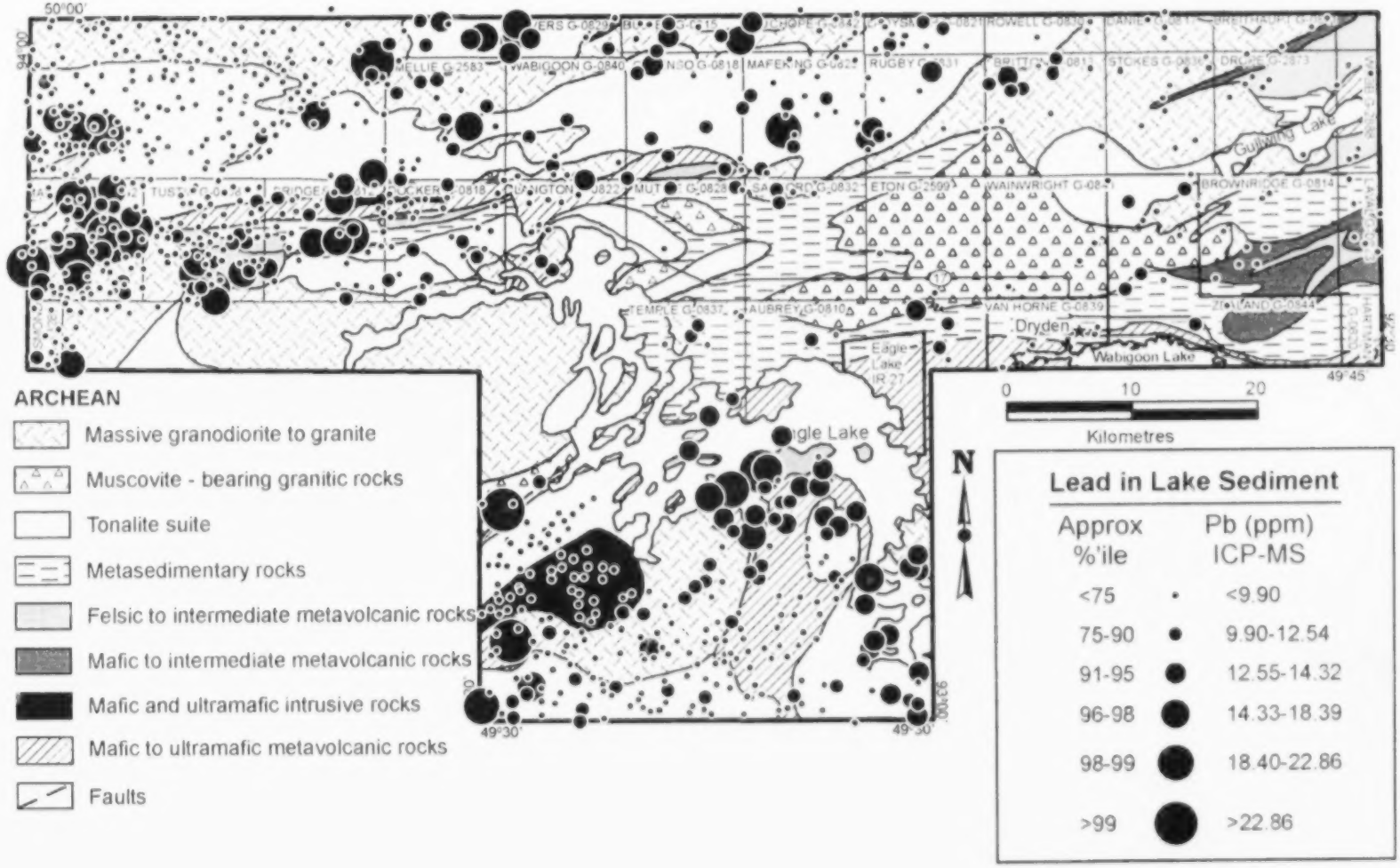

50°00
94°00
93°30
49°30
49°45
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
ROWELL G-0830
STOKES G-0836
DRAKE G-2873
Gullwing Lake
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZIOLAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
0
10
20
Kilometres
N
Lithium in Lake Sediment
Approx %'ile
Li (ppm) ICP-MS
<75
<15
75-90
15-27
91-95
28-33
96-98
34-38
>99
>38

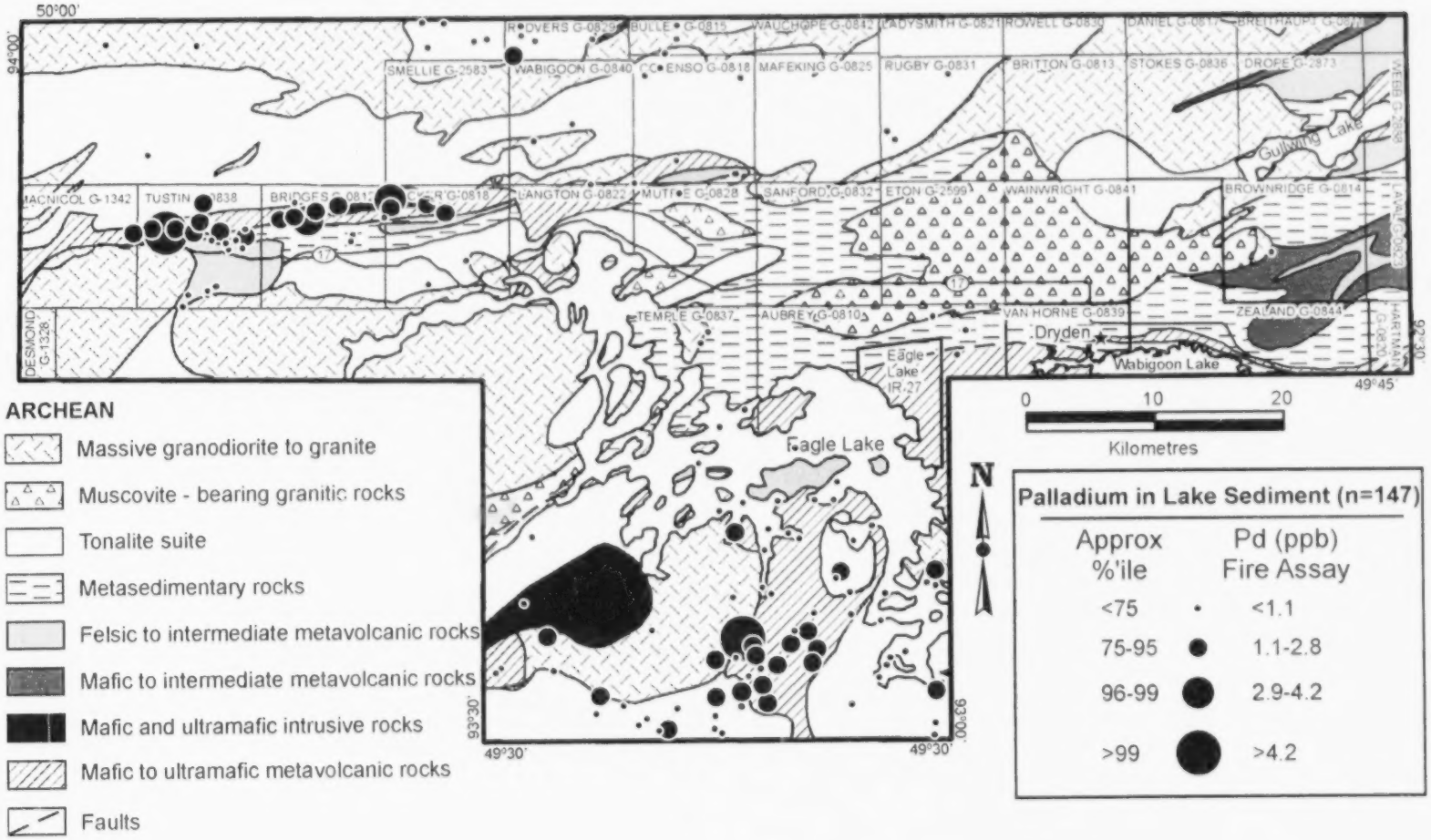

50°00'
49°45'
49°30'
93°30'
93°00'
SMELLIE G-2583
WABIGOON G-0840
ENSO G-0818
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2873
Gullwing Lake
TUSTING G-0827
CANIGTON G-0822
MUTTEE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
HARTMAN G-0820
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Manganese in Lake Sediment
Approx %'ile
Mn (ppm) ICP-OES
<75
<439
75-90
439-636
91-95
637-825
96-98
826-1315
98-99
1316-1773
>99
>1773

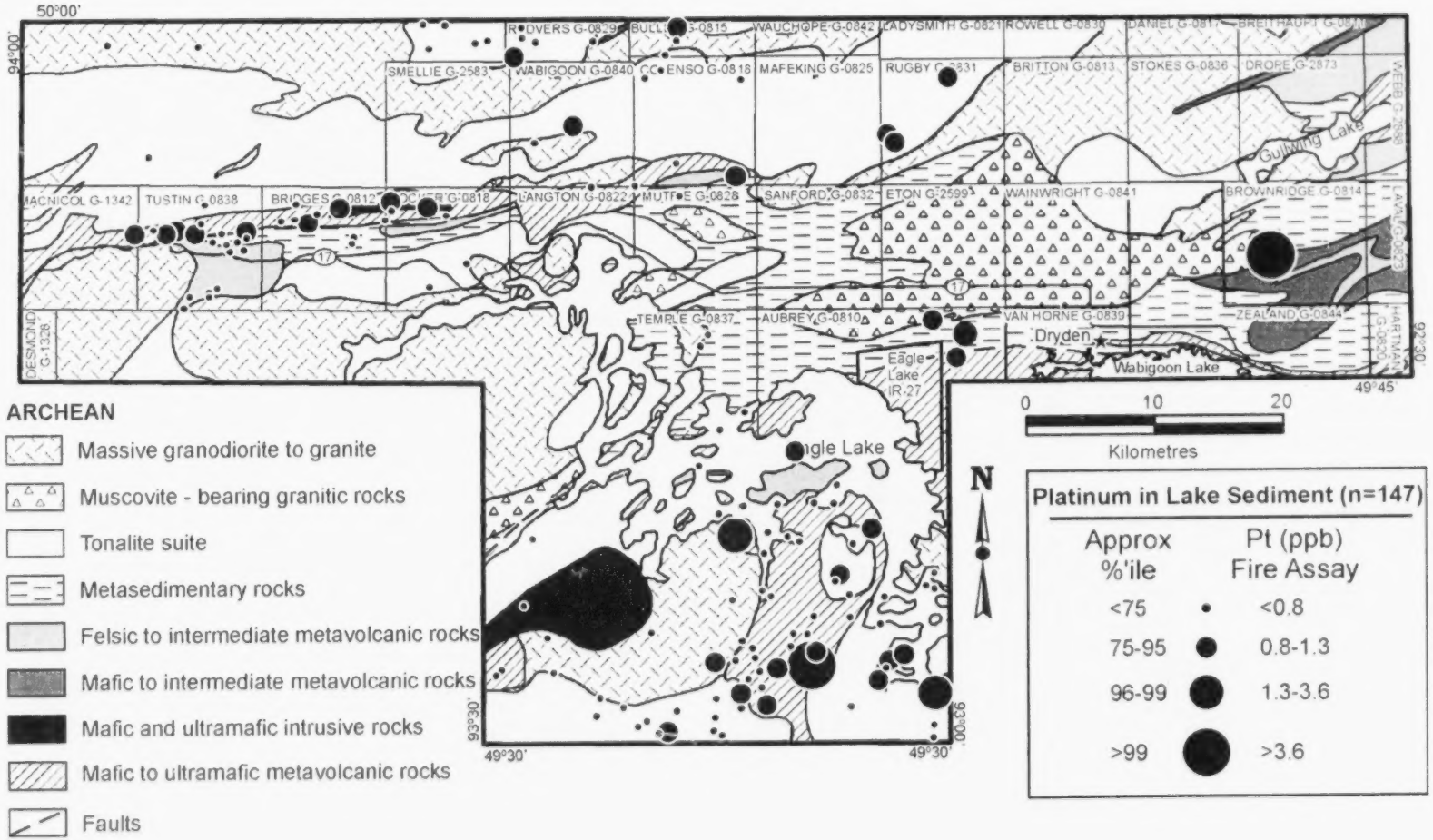

50°00'
RODVERS G-0825
SMELLIE G-2583
WABIGOON G-0840
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
GULLWING LAKE G-2688
TUCKER G-0818
MUTTOE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEELAND G-0844
HARTMAN G-0820
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
92°30'
49°45'
49°30'
92°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Molybdenum in Lake Sediment
Approx %'ile
Mo (ppm) ICP-MS
<75 <1.63
75-90 1.63-2.38
91-95 2.39-3.15
96-98 3.16-3.94
98-99 3.9-4.82
>99 >4.82

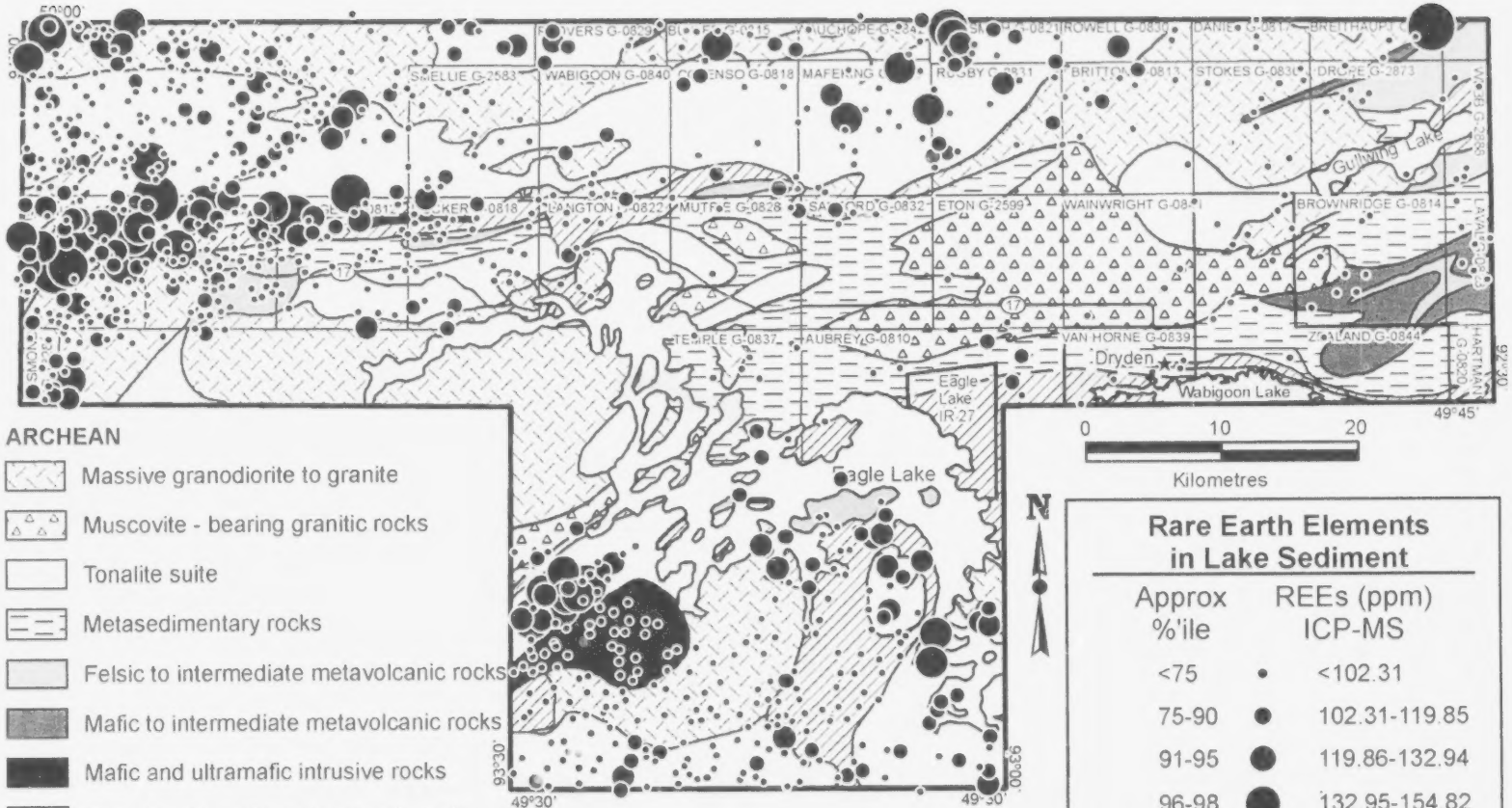

ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Niobium in Lake Sediment
Approx %'ile
Nb (ppm) ICP-MS
<75 <1.32
75-90 1.32-2.19
91-99 2.20-3.00
>99 >3.00
0 10 20
Kilometres
N
Dryden
Wabigoon Lake
Eagle Lake
Eagle Lake IR 27
Gullwing Lake
49°30'
49°45'
93°30'
94°00'


50°00'
94°00'
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0823
RUGBY G-0831
STOKES G-0839
DROPE G-2873
Gulliving Lake
WAINWRIGHT G-0851
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
49°30'
49°45'
93°30'
93°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Nickel in Lake Sediment
Approx %'ile
Ni (ppm) ICP-OES
<75
<36
75-90
36-49
91-95
50-56
96-98
57-63
98-99
63-66
>99
>66


50°00'
94°00'
WABIGOON G-0840
MAFEKING G-0826
RUGBY G-0831
STOKES G-0836
Gulning Lake
TUSTIN G-0817
RIDGER G-0819
TUCKER G-0818
CLAIGTON G-0823
MUTRIE G-0828
SAUNDERS G-0832
ETON G-2599
WAINWRIGHT G-0851
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZIELAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
49°45'
49°30'
94°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Lead in Lake Sediment
Approx %'ile
Pb (ppm) ICP-MS
<75 <9.90
75-90 9.90-12.54
91-95 12.55-14.32
96-98 14.33-18.39
98-99 18.40-22.86
>99 >22.86


50°00'
94°00'
ROVERS G-0823
BULLE G-0815
WAUCHOPE G-0842
LADYSMITH G-0821
ROWELL G-0830
DANIEL G-0817
BREITHAUPT G-0811
SMELLIE G-2583
WABIGOON G-0840
CONENSO G-0818
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2573
WEBSTER G-0812
Gulliver Lake
MACNICOL G-1342
TUSTIN G-0838
BRIDGES G-0819
DEER G-0818
LANGTON G-0822
MUTRIE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
LANDSBOROUGH G-0815
17
DESMOND G-1328
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
HARTMAN G-0830
Dryden
Eagle Lake IR 27
Wabigoon Lake
Eagle Lake
49°45'
93°30'
49°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Palladium in Lake Sediment (n=147)
Approx %'ile
Pd (ppb) Fire Assay
<75
<1.1
75-95
1.1-2.8
96-99
2.9-4.2
>99
>4.2


50°00'
94°00'
ROVERS G-0829
BULL G-0815
WAUCHOPE G-0842
LADYSMITH G-0821
ROWELL G-0830
DANIEL G-0817
SMELLIE G-2583
WABIGOON G-0840
ENSO G-0818
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2873
Gullwing Lake
MACNICOL G-1342
TUSTIN G-0838
BRIDGES G-0812
LANGTON G-0822
MUTRIE G-0828
SANFORD G-0832
ETON G-2599
WAINWRIGHT G-0841
BROWNRIDGE G-0814
DESMOND G-1328
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR-27
49°45'
92°30'
49°30'
93°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Platinum in Lake Sediment (n=147)
Approx %'ile
Pt (ppb) Fire Assay
<75
<0.8
75-95
0.8-1.3
96-99
1.3-3.6
>99
>3.6



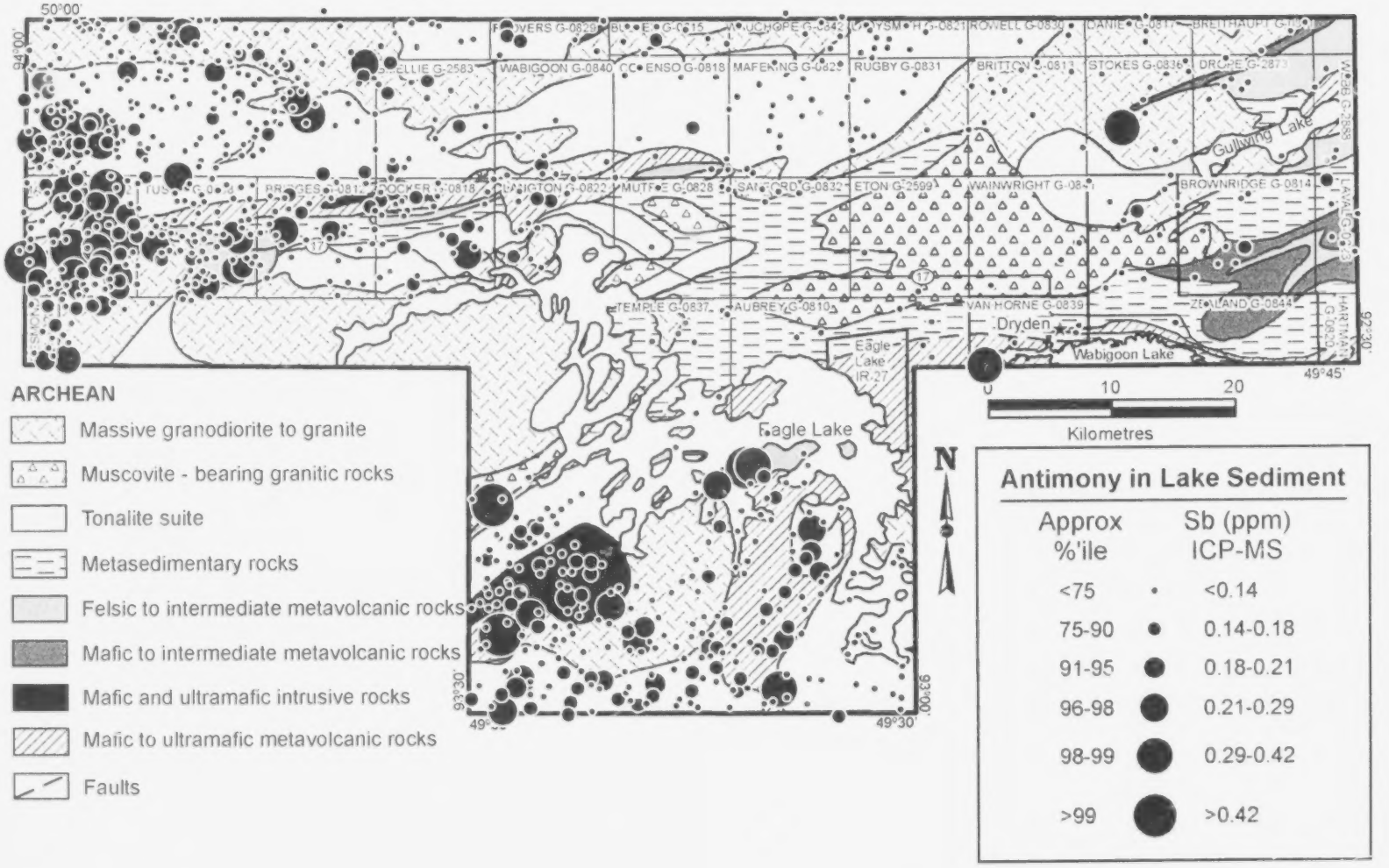
ARCHEAN

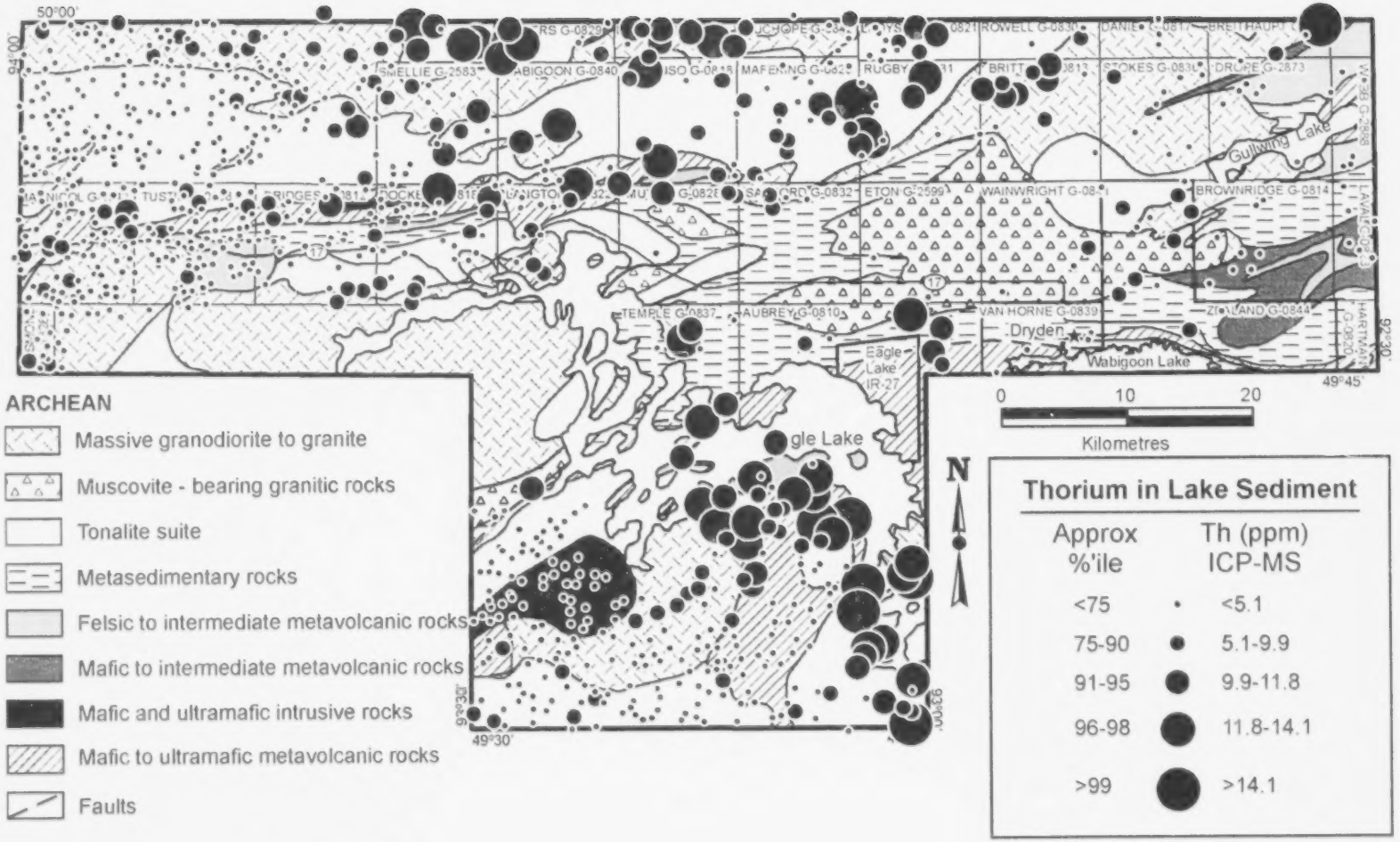
- Massive granodiorite to granite
- Muscovite - bearing granitic rocks
- Tonalite suite
- Metasedimentary rocks
- Felsic to intermediate metavolcanic rocks
- Mafic to intermediate metavolcanic rocks
- Mafic and ultramafic intrusive rocks
- Mafic to ultramafic metavolcanic rocks
- Faults

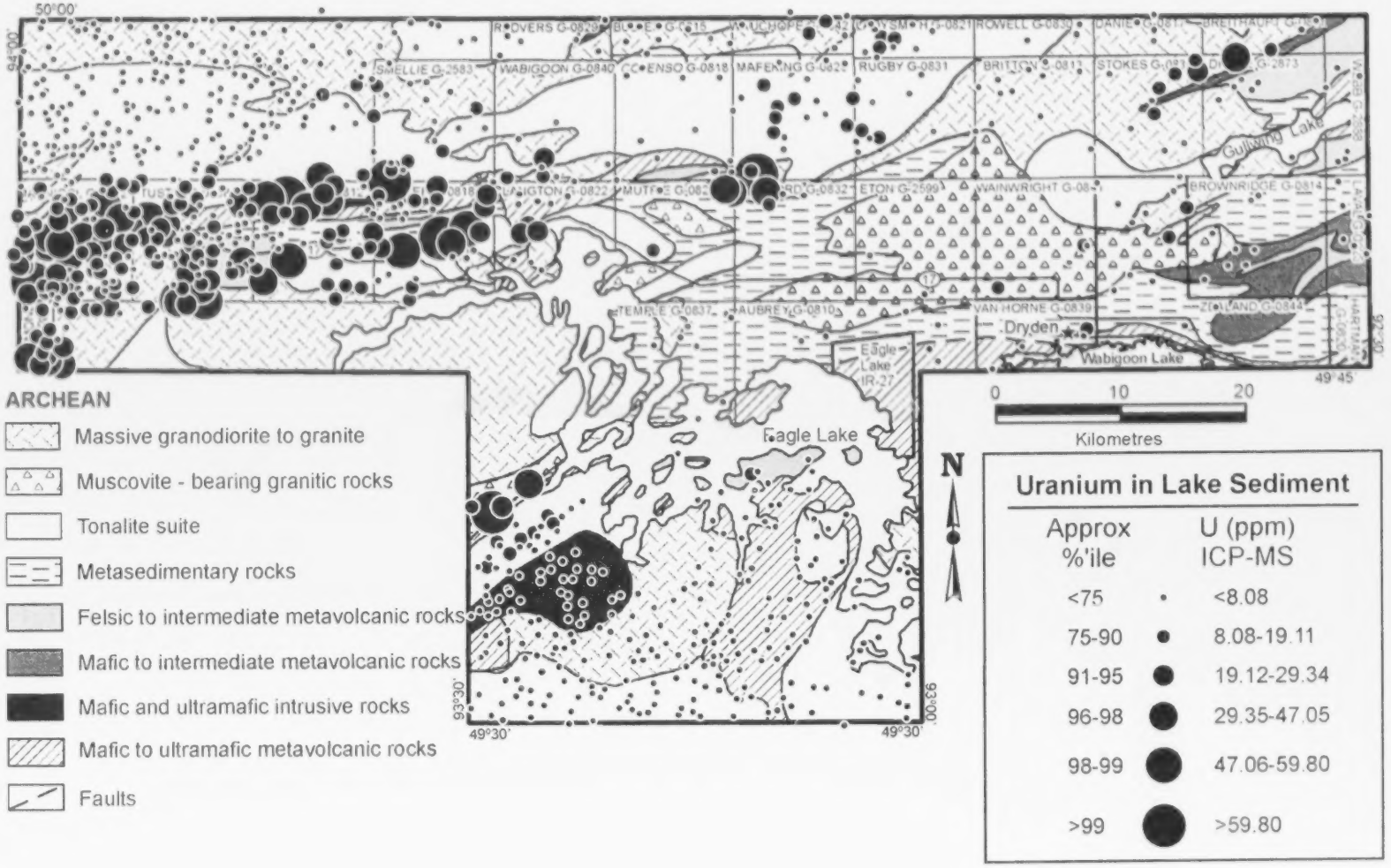
Rare Earth Elements in Lake Sediment

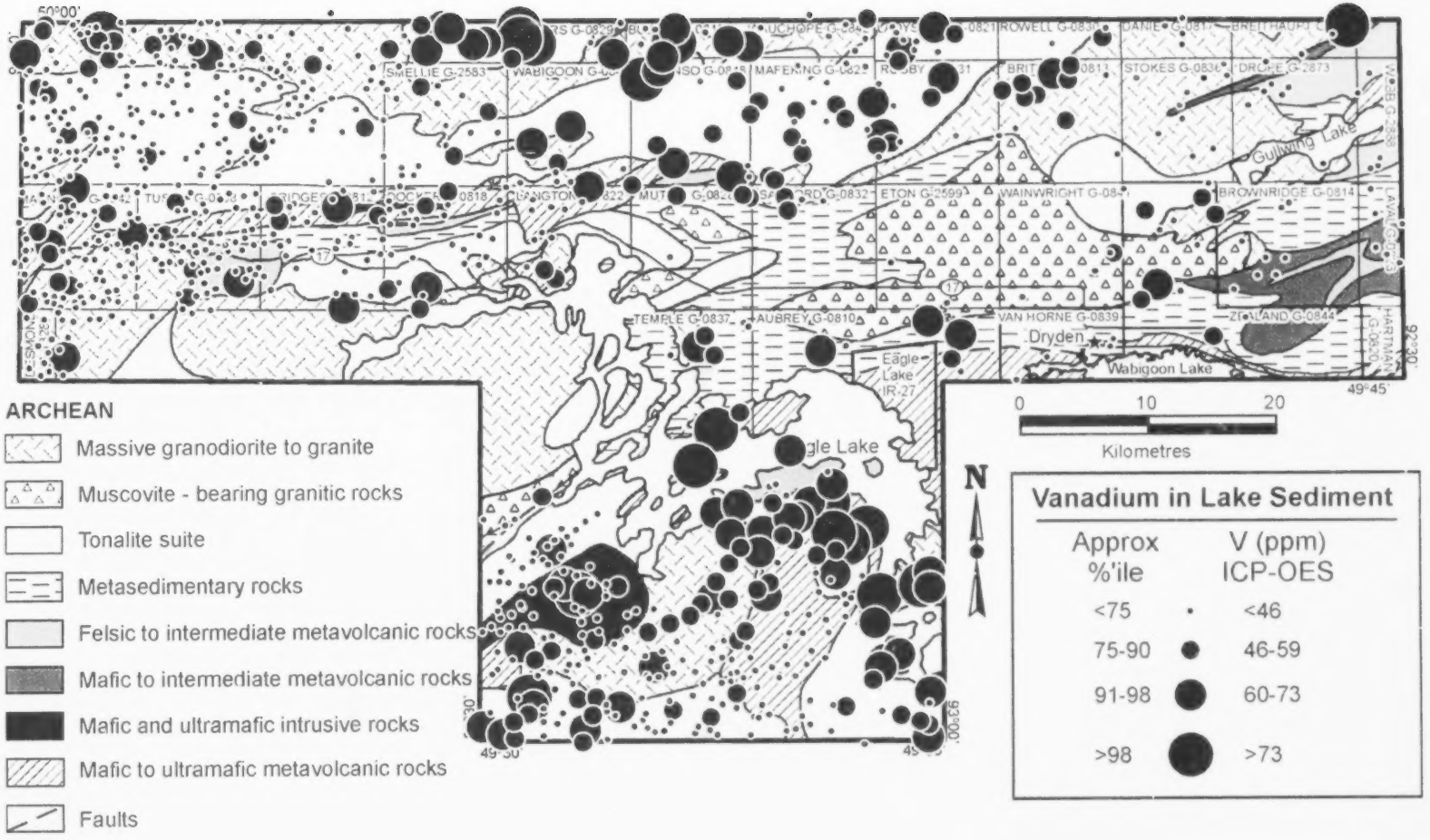
Approx %'ile	REEs (ppm) ICP-MS
<75	<102.31
75-90	102.31-119.85
91-95	119.86-132.94
96-98	132.95-154.82
98-99	154.83-177.40
>99	>177.41

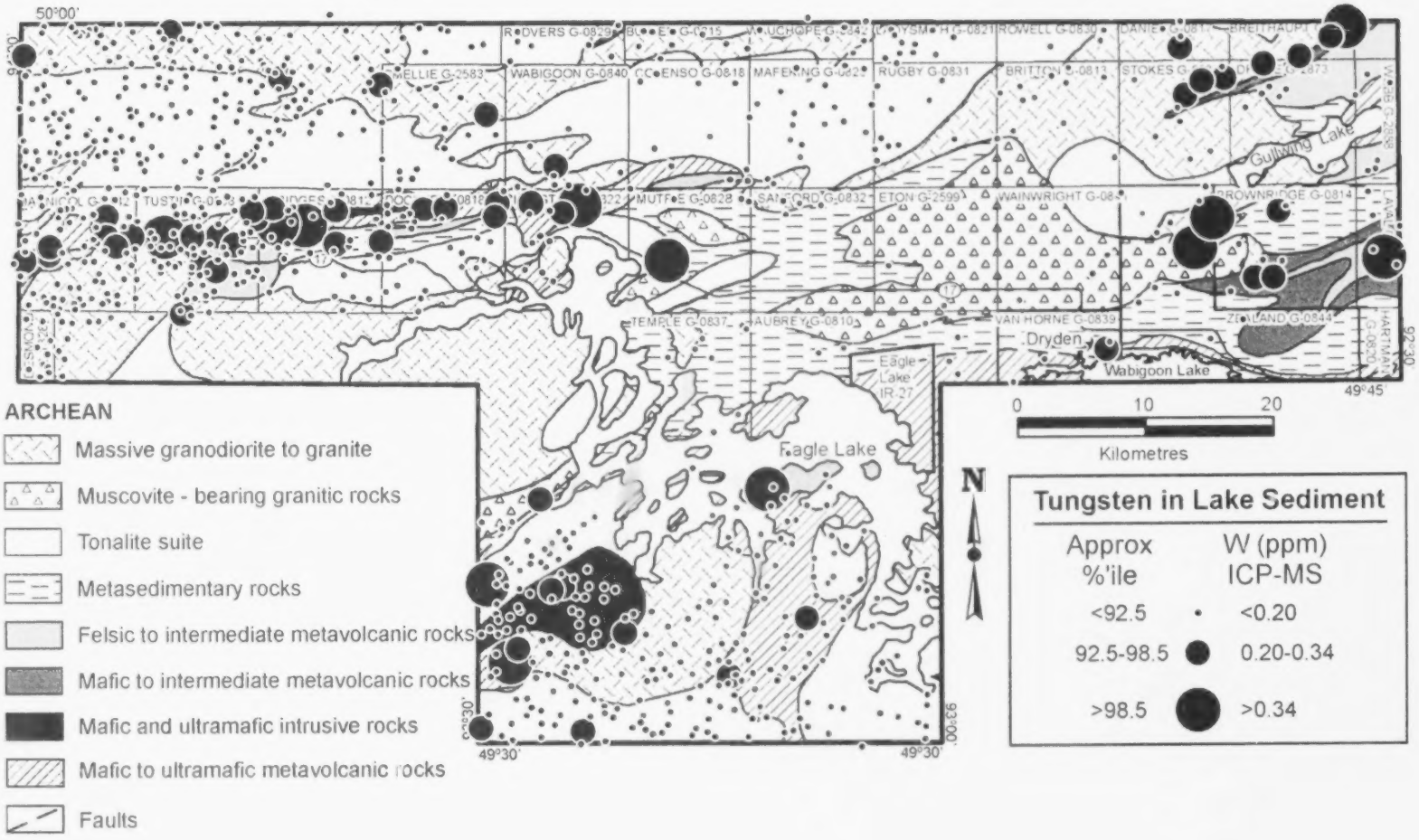
Note: REEs includes all rare earth elements except lanthanum and cerium.

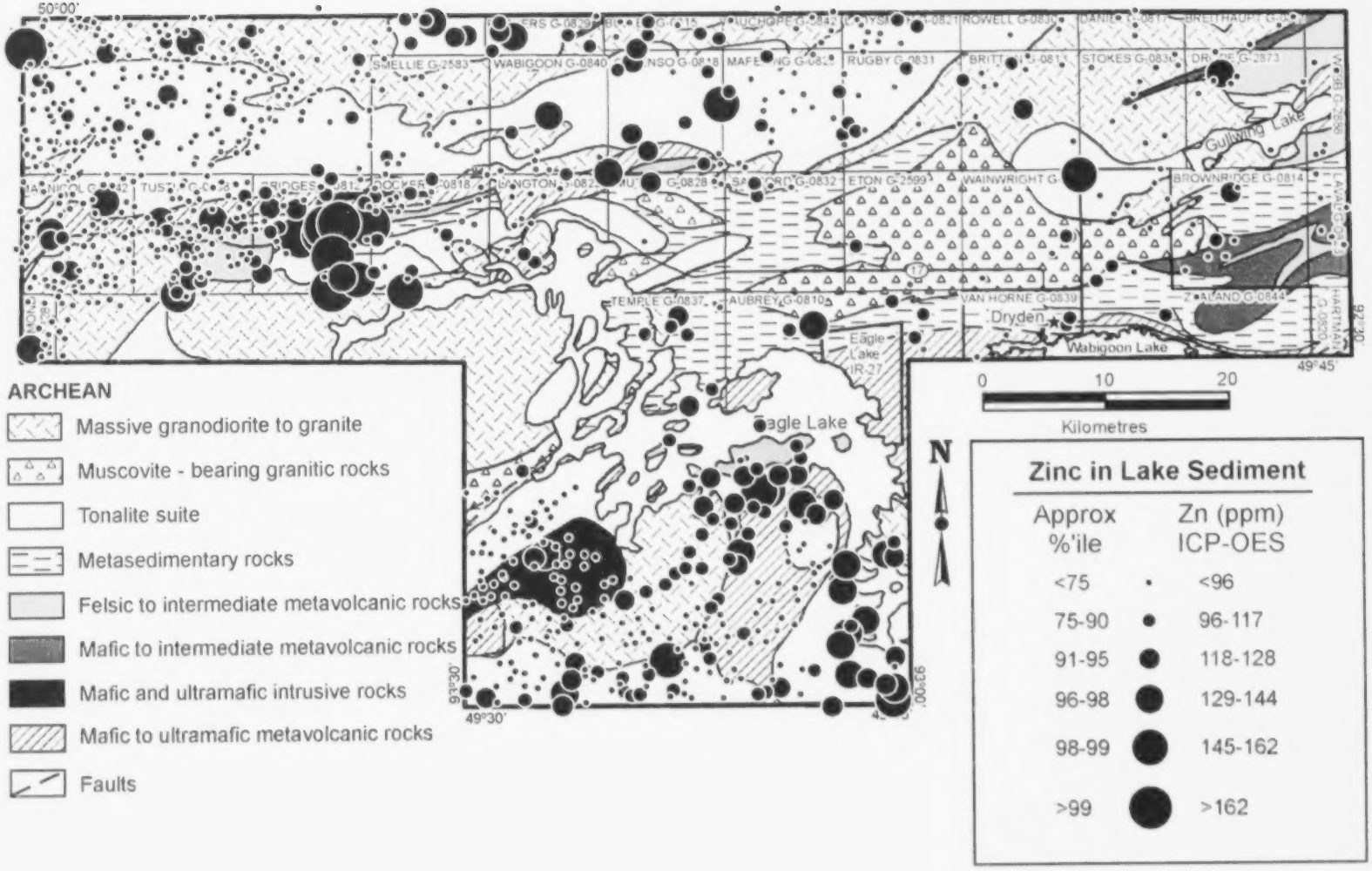

50°00'
94°00'
93°30'
49°30'
49°45'
WABIGOON G-0840
ENSO G-0818
MAFEKING G-0825
RUGBY G-0831
BRITTON G-0813
STOKES G-0836
DROPE G-2873
Gullwing Lake
BROWNRIDGE G-0814
ETON G-2599
WAINWRIGHT G-0847
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEELAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Antimony in Lake Sediment
Approx %'ile
Sb (ppm) ICP-MS
<75 <0.14
75-90 0.14-0.18
91-95 0.18-0.21
96-98 0.21-0.29
98-99 0.29-0.42
>99 >0.42


50°00'
94°00'
SMELLIE G-2583
ABIGOON G-0840
RUGBY
BRITT
STOKES G-0830
DRONE G-2873
Gullwing Lake
BROWNRIDGE G-0814
ETON G-2599
WAINWRIGHT G-0831
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZIONLAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR-27
49°30'
49°45'
97°30'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Thorium in Lake Sediment
Approx %'ile
Th (ppm) ICP-MS
<75
<5.1
75-90
5.1-9.9
91-95
9.9-11.8
96-98
11.8-14.1
>99
>14.1


50°00'
94°00'
97°30'
49°45'
93°30'
49°30'
ROVERS G-0820
SMELLIE G-2583
WABIGOON G-0840
MAFEKING G-0825
RUGBY G-0831
ROWELL G-0830
BRITTON G-0813
STOKES G-0812
Gullwing Lake
BROWNRIDGE G-0814
WAINWRIGHT G-0811
ETON G-2599
MUTRIE G-0832
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
Dryden
Wabigoon Lake
Eagle Lake IR-27
Eagle Lake
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Uranium in Lake Sediment
Approx %'ile
U (ppm) ICP-MS
<75 <8.08
75-90 8.08-19.11
91-95 19.12-29.34
96-98 29.35-47.05
98-99 47.06-59.80
>99 >59.80


ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
SMELLIE G-2583
WABIGOON G-0
MAFEKING G-0829
ROWELL G-0830
STOKES G-0836
DROPE G-2873
Gullwing Lake
TUS G-0
BRIDGE G-081
ROCKY G-0818
LANGTON G-0822
MUT G-082
RD G-0832
ETON G-2599
WAINWRIGHT G-08
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEALAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR-27
gle Lake
49°45'
49°30'
92°30'
93°00'
0
10
20
Kilometres
N
Vanadium in Lake Sediment
Approx %'ile
V (ppm) ICP-OES
<75
<46
75-90
46-59
91-98
60-73
>98
>73


50°00'
RODVERS G-0829
BLOKE G-0815
WABIGOON G-0840
CONENSO G-0818
MAFEKING G-0825
RUGBY G-0831
ROWELL G-0830
BRITTON G-0813
STOKES G-0873
Gullwing Lake
WAINWRIGHT G-0832
ETON G-2599
BROWNRIDGE G-0814
MUTFORD G-0828
SANFORD G-0832
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
ZEELAND G-0844
Dryden
Wabigoon Lake
Eagle Lake IR 27
Eagle Lake
92°30'
49°45'
49°30'
93°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Tungsten in Lake Sediment
Approx %'ile
W (ppm) ICP-MS
<92.5
<0.20
92.5-98.5
0.20-0.34
>98.5
>0.34


50°00'
SMELLIE G-2583
WABIGOON G-0840
RUGBY G-0831
STOKES G-0830
Gullwing Lake
BROWNRIDGE G-0814
TEMPLE G-0837
AUBREY G-0810
VAN HORNE G-0839
Dryden
Wabigoon Lake
Eagle Lake IR-27
Eagle Lake
49°45'
49°30'
92°30'
92°00'
0
10
20
Kilometres
N
ARCHEAN
Massive granodiorite to granite
Muscovite - bearing granitic rocks
Tonalite suite
Metasedimentary rocks
Felsic to intermediate metavolcanic rocks
Mafic to intermediate metavolcanic rocks
Mafic and ultramafic intrusive rocks
Mafic to ultramafic metavolcanic rocks
Faults
Zinc in Lake Sediment
Approx %'ile
Zn (ppm) ICP-OES
<75 <96
75-90 96-117
91-95 118-128
96-98 129-144
98-99 145-162
>99 >162

Appendix 3

Lake Sediment Analytical Data
for
LOI, Ag, As, Au (FA–ICP–MS), Au (INAA), Cr, Cu, Fe, Mo, Ni, Pb, Pd, Pt, REEs, Sb, U, V and Zn

Notes

Universal Transverse Mercator (metres easting and northing) co-ordinates are provided in North American Datum 1983 (NAD83), Zone 15.

FA = Fire assay – inductively coupled plasma mass spectrometry
Grav = Automated gravimetric method
INAA = Instrumental neutron activation analysis
INF = Insufficient sample for analysis
MS = [Inductively coupled plasma] mass spectrometry
N/A = Not available
NM = Not measured
NS = No sample
OES = [Inductively coupled plasma] optical emission spectrometry

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
1	510974	5511994	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2	513310	5514047	55.24	0.08	2.6	<2	NM	24	19.6	15094	1.6	21	7	NM	NM	36.9	0.07	8.35	25.2	108
3	513053	5513481	54.99	0.11	8.3	<2	NM	21	24.1	15177	2.4	20	7	NM	NM	34.7	0.10	5.40	33.6	117
4	515555	5517073	22	0.12	2.5	<2	NM	61	33.1	32160	1.7	46	10	NM	NM	90.7	0.10	4.14	56.0	109
5	516829	5518238	15.54	0.17	2.0	<2	NM	57	32.3	29704	0.5	39	11	NM	NM	82.2	0.09	1.73	61.2	102
6	518590	5517765	21.9	0.10	1.5	<2	NM	32	20.8	16504	0.7	24	5	NM	NM	51.8	0.06	2.90	30.5	81
7	521142	5514226	18.82	0.15	2.3	<2	NM	56	34.3	29130	0.5	44	11	NM	NM	84.3	0.07	2.97	48.6	103
8	523676	5515697	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
9	535681	5519854	45.95	0.07	1.9	<2	NM	15	25.1	4962	0.8	15	3	NM	NM	37.2	0.06	0.53	16.2	45
11	534689	5520491	36.18	0.10	2.9	<2	NM	27	21.6	21222	3.2	16	6	NM	NM	60.0	0.08	4.66	36.6	88
12	533868	5521040	NM	<0.04	INF	INF	NM	NM	3.7	NM	0.3	NM	4	NM	NM	10.4	<0.03	0.27	NM	NM
13	534780	5522434	8.55	0.05	0.5	<2	NM	8	26.0	2198	4.8	5	4	NM	NM	24.6	0.10	1.43	6.1	14
14	535923	5522871	64.63	<0.04	INF	INF	NM	15	15.0	19408	1.9	18	3	NM	NM	14.9	0.06	0.59	15.7	53
15	533821	5523654	53.93	NM	5.4	<2	NM	10	NM	7712	NM	23	NM	NM	NM	NM	NM	NM	6.3	65
16	533449	5525595	63.81	0.11	2.8	<2	NM	16	22.9	7651	1.2	19	9	NM	NM	30.1	0.16	0.82	15.1	55
17	534218	5527982	70.23	0.09	2.6	<2	NM	12	27.2	3994	1.4	20	5	NM	NM	25.6	0.13	0.64	9.9	68
18	534052	5527374	58.44	0.10	2.4	<2	NM	16	24.7	5919	1.1	17	7	NM	NM	33.4	0.09	0.88	15.6	70
19	533466	5527187	47.04	0.16	2.1	<2	NM	16	41.5	6807	1.1	21	5	NM	NM	47.5	0.09	1.05	14.1	76
21	529768	5527571	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
22	532520	5533050	47.89	0.06	2.6	<2	NM	12	26.8	4798	1.5	14	3	NM	NM	23.6	0.08	1.52	13.0	52
23	533417	5534640	31.55	0.05	1.6	<2	NM	26	15.0	12443	0.5	20	5	NM	NM	37.5	0.05	1.04	19.4	70
24	535211	5533971	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
25	531753	5538350	36.92	0.16	105.0	3	NM	80	25.6	135000	1.0	35	4	NM	NM	324.7	0.14	1.12	180.0	71
26	530594	5537639	25.87	0.08	2.3	<2	NM	26	17.7	13992	2.7	18	5	NM	NM	45.9	0.09	4.35	27.9	71
27	528617	5537359	4.09	<0.04	3.1	<2	NM	21	12.6	13524	0.8	14	4	NM	NM	43.0	0.07	5.31	23.8	29
28	528181	5536127	15.47	0.08	3.6	<2	NM	31	18.0	15136	1.6	19	6	NM	NM	47.0	0.09	12.75	44.6	44
29	525371	5535544	46.93	<0.04	4.5	<2	NM	22	13.7	8335	1.7	12	6	NM	NM	26.2	0.12	29.82	26.1	40
31	525815	5533742	61.42	0.10	3.4	<2	NM	23	18.8	10663	1.5	13	5	NM	NM	30.1	0.10	1.54	29.5	137
32	527131	5533536	43.63	0.12	1.3	<2	NM	23	27.2	16523	1.2	20	6	NM	NM	71.6	0.08	3.53	39.0	63
33	526608	5532959	45.18	0.08	3.2	<2	NM	19	22.8	10456	1.8	15	5	NM	NM	45.9	0.10	7.41	28.2	55
34	525226	5533199	38.02	0.05	1.5	<2	NM	9	7.4	1338	0.5	4	6	NM	NM	11.8	0.05	0.37	6.9	15
35	523939	5532143	21.9	0.05	1.9	<2	NM	11	8.8	2195	0.5	7	7	NM	NM	15.6	0.07	0.42	8.9	29
36	522104	5535301	36.03	0.05	2.9	<2	NM	16	12.7	8216	0.9	14	4	NM	NM	33.1	0.06	12.37	18.2	55
37	522309	5534441	27.75	0.06	4.5	<2	NM	30	16.9	19025	0.9	19	5	NM	NM	53.8	0.07	19.15	42.3	59
38	520537	5534242	23.01	0.05	4.8	<2	NM	27	13.8	19598	0.7	16	4	NM	NM	48.9	0.05	15.77	35.4	58
39	519236	5533144	46.85	0.04	5.9	<2	NM	17	10.4	8056	1.9	12	4	NM	NM	23.0	0.10	9.81	30.0	73
41	518876	5538872	43.73	0.09	1.6	<2	NM	33	18.8	16856	0.5	22	6	NM	NM	58.1	0.07	4.16	29.6	46
42	518895	5537712	43.92	0.05	4.4	<2	NM	17	11.2	13464	1.3	12	3	NM	NM	32.0	0.05	4.80	23.3	51
43	518851	5536872	41.37	<0.04	9.1	<2	NM	21	8.3	73696	1.4	15	3	NM	NM	21.7	0.04	1.84	34.1	50
44	517507	5538285	15.79	0.07	1.6	<2	NM	33	22.7	17592	0.6	23	7	NM	NM	67.8	0.08	1.75	34.6	55
45	518653	5532155	68.82	0.07	3.0	<2	NM	13	12.8	4626	1.2	9	4	NM	NM	19.2	0.09	2.81	16.2	40
46	518826	5531076	53.13	0.05	4.0	<2	NM	8	12.8	3073	2.0	12	4	NM	NM	15.6	0.07	9.20	9.3	67
47	516917	5529944	66.88	0.08	1.8	<2	NM	10	12.0	3605	1.2	7	5	NM	NM	18.0	0.30	0.53	11.1	63
48	519622	5528191	52.43	<0.04	1.5	<2	NM	7	12.5	2223	0.9	11	2	NM	NM	29.8	0.06	4.15	7.8	26
49	521197	5528770	43.28	0.19	2.1	<2	NM	28	38.3	15825	2.0	20	7	NM	NM	76.5	0.11	4.65	41.2	85
51	520854	5526081	43.28	0.08	2.6	<2	NM	19	20.0	7831	1.0	24	7	NM	NM	50.5	0.11	3.84	17.7	51

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
52	520335	5524935	20.39	0.11	2.4	<2	NM	56	33.7	30228	0.9	39	10	NM	NM	88.1	0.10	5.33	57.5	87
53	521369	5523620	28.28	0.10	3.3	<2	NM	50	29.8	26950	3.7	37	9	NM	NM	78.9	0.08	11.90	49.3	90
54	522748	5517881	57.94	0.14	2.0	<2	NM	23	33.1	8326	1.4	18	5	NM	NM	81.0	0.11	2.82	45.4	77
55	524649	5518941	23.19	0.09	1.6	<2	NM	36	37.3	18585	0.9	29	7	NM	NM	61.4	0.09	1.38	32.9	66
56	526077	5518976	33.31	0.08	1.2	<2	NM	22	27.7	6730	0.6	16	5	NM	NM	25.4	0.05	1.01	15.3	54
57	526791	5520245	71.2	0.16	2.7	<2	NM	16	76.6	4316	1.4	14	9	NM	NM	49.0	0.16	1.73	12.7	27
58	525259	5520314	66.74	0.17	1.4	<2	20.2	18	97.3	5831	1.2	23	5	0.4	11.9	30.8	0.11	1.17	19.5	103
59	527071	5524548	37.55	0.13	2.0	<2	NM	32	22.9	14391	0.7	26	6	NM	NM	53.1	0.08	1.91	28.8	84
61	526505	5524125	42.18	0.11	2.2	<2	NM	30	25.9	17264	3.5	25	7	NM	NM	64.0	0.09	4.39	30.7	120
62	523406	5521552	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
63	519960	5521293	35.49	0.09	3.0	<2	NM	41	22.8	21566	4.0	30	7	NM	NM	68.7	0.07	11.32	40.2	81
64	518089	5523203	60.92	0.08	3.0	<2	NM	17	19.7	8822	1.9	15	7	NM	NM	31.7	0.15	5.99	20.0	49
65	516998	5522450	49.51	0.08	2.6	<2	NM	28	22.9	14521	1.6	23	6	NM	NM	46.1	0.10	5.42	31.2	62
66	515889	5523962	15.17	0.09	3.0	<2	NM	57	36.6	31962	0.8	43	11	NM	NM	81.5	0.08	3.81	54.6	88
67	514189	5525638	59.83	0.09	2.3	<2	NM	21	14.0	7122	1.0	14	6	NM	NM	31.2	0.05	0.48	20.3	144
68	513734	5528367	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
69	515247	5534304	18.75	0.11	2.5	<2	NM	47	29.8	23381	0.6	35	9	NM	NM	70.4	0.08	3.22	41.1	81
71	512886	5534527	57.83	0.06	2.1	<2	NM	16	17.6	6729	0.9	19	5	NM	NM	22.7	0.06	0.56	11.3	60
72	512898	5538192	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
73	512645	5537415	15.08	0.10	1.7	<2	NM	56	29.7	28978	0.4	41	9	NM	NM	84.6	0.08	1.77	51.4	89
74	508693	5536974	36.87	0.16	1.7	<2	NM	32	28.7	18005	1.0	26	8	NM	NM	130.8	0.09	3.35	44.6	73
75	510114	5535288	11.39	0.11	2.4	<2	NM	58	31.1	31338	0.5	41	11	NM	NM	102.6	0.09	3.21	56.6	85
76	509922	5534133	11.64	0.11	2.1	<2	NM	62	32.5	31436	0.5	44	11	NM	NM	102.3	0.09	3.65	57.6	90
77	508771	5534661	28.12	0.17	1.7	<2	NM	50	39.1	30288	0.9	37	9	NM	NM	97.5	0.09	2.33	60.0	97
78	509711	5530983	30.37	0.19	2.4	<2	NM	51	41.2	28027	1.6	41	9	NM	NM	88.6	0.11	7.51	52.3	122
79	507460	5532985	10.7	0.12	2.9	<2	NM	66	36.9	33965	0.3	48	12	NM	NM	102.9	0.08	3.66	55.2	96
81	506529	5532799	11.12	0.11	2.2	<2	NM	59	42.6	30376	0.5	45	12	NM	NM	98.3	0.12	3.53	54.4	86
82	506319	5533881	11.16	0.11	3.2	<2	NM	59	35.6	31259	0.4	45	13	NM	NM	98.0	0.09	2.97	50.3	91
83	504763	5533343	18.6	0.11	2.6	<2	NM	64	37.7	32659	0.6	47	11	NM	NM	92.1	0.11	3.90	57.5	98
84	503981	5534749	7.22	0.09	2.5	<2	NM	57	26.7	30692	0.4	38	10	NM	NM	91.6	0.08	2.06	54.2	73
85	504071	5535879	9.08	0.11	2.6	<2	0.5	79	28.1	41938	0.3	52	12	0.6	0.6	112.2	0.09	2.32	69.0	108
86	504147	5537664	5.84	0.06	1.3	<2	NM	41	16.2	20656	0.2	26	7	NM	NM	68.5	0.06	1.66	37.3	51
87	501109	5537746	27.47	0.16	2.6	<2	NM	57	36.2	28299	0.6	42	12	NM	NM	103.0	0.12	6.93	48.8	101
88	499737	5536365	45.74	0.12	3.2	<2	NM	40	31.3	22140	1.4	32	8	NM	NM	73.2	0.11	6.49	43.4	83
89	500202	5534335	11.15	0.14	2.9	<2	1.2	76	35.3	39634	1.1	53	14	0.7	0.9	128.2	0.11	6.91	67.5	111
91	501381	5534562	9.78	0.11	3.4	<2	NM	61	30.3	33535	0.4	45	11	NM	NM	92.7	0.06	2.84	53.6	87
92	503839	5531426	9.69	0.14	2.1	<2	NM	66	33.0	35573	0.4	46	13	NM	NM	117.9	0.07	3.27	59.2	93
93	501141	5529810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
94	504494	5529825	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
95	505793	5530398	37.68	0.18	2.7	<2	NM	37	38.5	24592	1.2	31	7	NM	NM	84.5	0.10	4.64	43.2	96
96	513381	5520688	19.03	0.08	1.9	<2	NM	55	26.5	27491	1.7	39	9	NM	NM	79.3	0.07	6.68	48.3	98
97	513121	5520727	24.22	0.09	2.0	<2	NM	54	26.8	26823	1.6	40	9	NM	NM	73.0	0.09	9.20	46.3	98
98	511952	5519300	62.83	0.07	2.7	<2	NM	17	17.1	7911	0.8	19	5	NM	NM	24.4	0.08	0.72	14.1	86
99	506213	5517318	65.9	0.08	2.3	<2	NM	18	16.4	9958	1.0	22	5	NM	NM	23.1	0.08	11.02	14.5	75
101	500327	5516913	41.9	0.08	2.5	3	NM	22	21.2	10880	1.3	25	5	NM	NM	36.9	0.07	4.73	20.2	85
102	501382	5514412	13.04	0.13	3.1	<2	2.7	65	44.6	35024	0.7	51	12	0.8	1.0	106.0	0.11	1.97	60.1	97

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
103	500682	5512583	17.35	0.16	3.4	<2	3.7	66	39.7	33638	0.5	52	12	0.8	1.0	104.0	0.11	2.26	53.8	108
104	501376	5511601	28.79	0.14	3.6	<2	NM	50	35.4	25942	0.8	40	10	NM	NM	76.8	0.10	1.99	43.1	90
105	505711	5510921	54.44	0.11	9.4	<2	NM	23	21.4	10484	2.5	21	5	NM	NM	38.0	0.42	5.80	16.2	72
106	508154	5512720	34.78	0.08	2.3	<2	NM	31	23.3	13619	0.6	26	6	NM	NM	48.1	0.06	1.41	23.0	69
108	490456	5513258	28.12	0.18	2.4	<2	NM	57	39.0	31258	1.0	42	11	NM	NM	93.9	0.13	1.96	59.9	99
109	492424	5513630	48.76	0.13	2.0	<2	NM	32	30.6	14033	1.4	29	8	NM	NM	46.3	0.11	3.18	29.2	130
111	498836	5515512	17.14	0.13	2.9	<2	0.5	73	48.4	39036	1.0	54	13	0.8	1.0	108.7	0.12	7.12	70.6	105
112	495973	5520019	76.07	0.09	3.0	<2	NM	12	22.9	4825	2.6	22	5	NM	NM	15.8	0.14	0.78	10.6	98
113	490725	5524781	47.12	0.18	2.6	<2	NM	28	32.4	12325	1.1	28	8	NM	NM	50.2	0.11	4.27	26.1	89
114	487725	5525145	26.16	0.16	2.7	<2	NM	44	35.1	27498	1.3	32	11	NM	NM	103.0	0.10	30.17	55.3	104
115	487949	5524091	19.49	0.15	2.5	<2	NM	57	29.9	29563	0.6	43	11	NM	NM	85.3	0.08	9.11	48.1	115
116	489055	5524932	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
117	489109	5528518	20.79	0.13	1.9	<2	NM	52	30.8	29408	0.5	38	10	NM	NM	92.8	0.07	6.82	48.8	92
118	489243	5529471	18.5	0.07	2.1	<2	NM	42	22.6	22233	0.5	30	9	NM	NM	67.6	0.08	5.29	38.1	68
119	488320	5529802	26.52	0.16	2.1	<2	NM	51	35.0	27530	0.6	39	19	NM	NM	87.9	0.08	11.58	53.1	99
121	491025	5531008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
122	491797	5532347	17.08	0.11	2.2	<2	NM	61	28.6	33107	0.6	42	10	NM	NM	98.4	0.08	4.73	55.9	92
123	492505	5531252	25.91	0.11	2.4	<2	NM	45	26.4	25329	0.9	32	8	NM	NM	94.5	0.08	7.52	47.4	74
124	494208	5530368	31.05	0.10	2.5	<2	NM	44	35.7	22735	1.1	33	10	NM	NM	90.1	0.12	11.53	45.0	84
125	495427	5529946	18.42	0.09	1.8	<2	0.5	68	54.0	34128	0.8	49	13	0.9	1.0	103.6	0.12	8.19	63.0	99
126	494949	5529070	15.68	0.13	2.6	<2	NM	66	37.1	33938	0.5	47	14	NM	NM	104.9	0.13	7.87	58.1	100
127	495108	5528209	26.3	0.06	1.0	<2	NM	7	10.9	1534	0.4	4	7	NM	NM	20.3	0.07	3.22	5.4	26
128	496017	5529307	13.2	0.12	2.2	<2	0.5	71	42.2	35059	0.5	51	12	0.8	1.0	105.6	0.07	7.09	59.2	99
129	496763	5529366	36.36	0.08	3.2	<2	NM	39	32.5	17228	0.7	32	9	NM	NM	74.9	0.08	9.80	32.1	69
131	496243	5532186	40.1	0.10	2.0	<2	NM	32	25.1	15374	2.8	26	7	NM	NM	59.4	0.08	5.45	32.3	68
132	494698	5532521	26.78	0.12	2.5	<2	NM	47	30.7	41124	0.9	30	8	NM	NM	146.0	0.07	13.83	60.2	97
133	495127	5533930	42.01	0.13	1.0	<2	NM	12	17.8	3132	0.8	7	9	NM	NM	45.3	0.06	7.60	14.8	57
134	499200	5532831	13.17	0.08	2.5	<2	NM	53	33.0	26590	0.7	38	9	NM	NM	85.8	0.08	5.89	48.4	72
135	499483	5538266	15.23	0.14	2.2	<2	NM	71	32.6	37367	1.4	48	11	NM	NM	107.9	0.09	4.35	63.6	116
136	496230	5538351	45.66	0.10	2.2	<2	NM	18	20.6	12018	0.7	13	8	NM	NM	165.1	0.10	4.96	34.7	55
137	496515	5537901	33.5	0.10	1.7	<2	NM	27	20.1	13808	0.6	20	6	NM	NM	138.4	0.07	5.47	33.9	79
138	497054	5537319	46.44	0.11	2.1	<2	NM	26	27.2	28941	1.1	20	6	NM	NM	127.3	0.11	17.53	37.6	76
139	498078	5537198	46.84	0.11	2.7	<2	NM	34	31.4	13602	1.2	32	7	NM	NM	87.7	0.09	11.54	28.0	68
141	497931	5536536	50.11	0.13	2.7	<2	NM	30	29.6	12055	1.3	29	6	NM	NM	67.8	0.08	3.78	28.5	78
142	496889	5536500	35.53	0.18	2.8	<2	NM	40	35.8	21950	1.0	26	11	NM	NM	134.6	0.10	15.00	63.0	95
143	496674	5535729	23.29	0.10	2.0	<2	NM	38	24.8	23006	0.6	27	9	NM	NM	114.3	0.07	5.89	46.9	76
144	495746	5536144	67.24	0.07	2.2	<2	NM	15	28.0	11235	2.3	13	6	NM	NM	65.7	0.14	5.78	16.4	55
145	494260	5539000	20.46	0.08	2.5	<2	NM	39	22.6	27194	0.7	26	8	NM	NM	103.2	0.10	4.89	47.2	72
146	494119	5537462	26.7	0.06	1.3	<2	NM	30	19.9	19562	0.9	21	7	NM	NM	85.3	0.09	4.32	32.9	68
147	493258	5536524	27.18	0.07	1.7	<2	NM	29	20.6	18180	0.9	20	6	NM	NM	88.5	0.10	4.33	32.2	63
148	494115	5535287	32.43	0.09	2.8	<2	NM	22	22.3	17177	0.8	17	8	NM	NM	78.7	0.09	4.33	37.0	57
149	492619	5535528	53.57	0.13	1.9	<2	NM	9	29.1	5294	1.7	8	5	NM	NM	148.0	0.07	2.41	23.0	65
151	492595	5538539	44.67	0.09	1.9	<2	NM	16	25.0	9261	1.2	14	5	NM	NM	98.3	0.08	12.84	22.2	52
152	491220	5537637	64.47	0.08	2.9	<2	NM	14	32.8	4015	1.0	15	5	NM	NM	70.9	0.11	11.29	22.3	76
153	489728	5539311	29	0.11	2.8	<2	NM	33	33.5	21020	0.9	26	9	NM	NM	96.9	0.10	5.11	40.5	75
154	488820	5535387	77.39	0.10	2.6	<2	NM	9	24.7	15530	1.7	14	5	NM	NM	51.6	0.06	4.03	22.1	115

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	--------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	--------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	--------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
155	491061	5534044	31.25	0.06	0.9	<2	NM	29	15.9	13868	0.7	18	5	NM	NM	53.9	0.05	3.36	23.8	64
156	490025	5532512	45.22	0.13	2.5	<2	NM	25	21.6	15796	2.1	18	5	NM	NM	80.6	0.09	11.35	35.4	56
157	488644	5531908	31.53	0.16	2.7	<2	NM	41	30.9	26366	1.5	27	10	NM	NM	142.8	0.11	12.62	58.1	93
158	488517	5531002	67.23	0.08	2.3	<2	NM	12	19.2	10510	1.5	12	4	NM	NM	48.9	0.08	9.51	25.8	64
159	485131	5531609	36.29	0.25	2.2	<2	NM	45	32.8	23904	1.3	36	10	NM	NM	71.3	0.10	1.41	49.4	161
161	485773	5532624	25.63	0.16	3.3	<2	NM	59	37.6	31689	0.7	46	11	NM	NM	100.9	0.09	5.77	52.6	104
162	487577	5533590	60.1	0.07	2.2	<2	NM	13	20.3	7619	1.4	11	5	NM	NM	130.3	0.11	8.48	20.2	53
163	485964	5538373	16.97	0.08	2.5	<2	NM	47	22.3	23649	0.4	32	13	NM	NM	73.5	0.10	2.53	38.2	85
164	483442	5537316	14.36	0.14	2.4	<2	NM	69	29.3	37705	1.6	48	11	NM	NM	114.4	0.08	3.66	67.1	113
165	484990	5536929	16.1	0.16	3.6	<2	NM	64	30.7	37375	0.5	44	15	NM	NM	113.3	0.13	3.24	71.4	105
166	484061	5534232	43.4	0.20	2.4	<2	0.5	55	46.1	26147	1.1	50	9	0.1	0.5	93.5	0.14	5.39	46.5	112
167	486548	5526813	14.77	0.16	1.9	<2	NM	55	29.1	30507	0.7	38	11	NM	NM	94.8	0.08	16.05	59.2	94
168	486987	5526479	29.41	0.12	2.1	<2	NM	32	26.4	17321	1.2	25	8	NM	NM	93.9	0.09	62.54	46.9	64
169	485063	5525117	23.08	0.12	2.3	<2	NM	52	35.2	27390	1.4	45	10	NM	NM	103.9	0.10	46.83	51.6	89
171	484493	5525343	22.56	0.12	2.6	<2	NM	47	35.5	25504	0.9	43	11	NM	NM	97.4	0.09	44.39	46.8	88
172	483676	5526802	24.59	0.18	3.2	<2	0.5	56	47.5	33230	1.2	49	12	0.6	1.1	111.9	0.10	6.35	66.0	105
173	484918	5527599	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
174	485008	5526730	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
175	482161	5530097	32.1	0.14	3.3	<2	NM	51	33.2	25955	1.1	43	12	NM	NM	84.1	0.15	4.58	46.4	104
176	481239	5534214	48.6	0.09	2.9	<2	NM	30	31.6	17539	0.7	26	7	NM	NM	71.3	0.11	2.60	40.3	92
177	481619	5538058	15.31	0.11	1.8	<2	NM	43	24.0	22392	0.4	31	8	NM	NM	94.9	0.07	4.57	39.8	73
178	479267	5538293	14.28	0.14	1.9	<2	0.5	70	33.6	34438	0.6	49	10	0.4	0.8	100.5	0.10	3.70	61.8	104
179	479207	5537253	24.43	0.19	4.6	<2	0.5	71	55.1	41538	1.0	54	13	0.4	0.6	139.4	0.15	2.53	75.4	109
181	478307	5536166	14.75	0.15	2.4	<2	0.5	72	33.2	34620	0.5	50	12	0.1	0.6	96.1	0.12	2.02	61.3	122
182	478001	5535008	12.64	0.19	2.6	<2	3.0	80	42.8	41487	0.6	59	14	0.4	0.4	116.6	0.12	3.71	69.7	125
183	476744	5534403	28.24	0.22	2.5	<2	0.5	61	45.7	41217	0.9	49	11	0.4	0.6	104.3	0.08	2.02	76.4	113
184	476648	5537139	60.65	0.14	2.2	<2	NM	26	70.2	11687	2.2	26	6	NM	NM	76.9	0.10	3.48	32.1	53
185	476997	5538343	13.3	0.12	1.0	<2	NM	42	26.4	21701	0.4	33	8	NM	NM	84.7	0.06	2.49	38.0	71
186	477718	5538276	10.2	0.11	1.2	<2	NM	47	23.4	23881	0.3	34	8	NM	NM	75.1	0.06	1.55	40.9	78
187	475036	5538792	47.37	0.11	2.7	<2	NM	27	30.0	19634	1.9	23	6	NM	NM	76.1	0.11	3.00	29.1	58
188	474480	5536381	28.4	0.21	2.6	<2	NM	55	42.3	29603	0.9	45	11	NM	NM	89.3	0.11	1.92	62.1	100
189	472701	5537283	58.4	0.20	3.2	<2	0.5	40	84.2	22121	1.3	32	5	0.1	0.1	81.8	0.13	1.66	40.7	117
191	468255	5537220	20.78	0.19	2.4	<2	0.5	83	44.3	39793	1.1	66	13	0.5	0.5	117.0	0.15	2.66	74.3	141
192	467146	5538356	18.2	0.18	4.2	<2	1.0	63	47.2	35899	1.3	52	15	0.6	0.4	109.7	0.18	2.62	73.7	100
193	467181	5537598	17.76	0.20	4.0	<2	1.1	81	55.8	39424	1.1	64	16	0.9	0.7	128.4	0.17	3.42	73.5	123
194	466569	5536072	15.43	0.18	4.4	<2	1.7	68	46.2	34803	0.7	55	14	1.2	1.0	112.5	0.11	3.25	58.6	103
195	464475	5537362	17.5	0.20	3.3	<2	0.5	83	49.1	41157	0.7	66	15	1.0	0.6	127.3	0.13	3.44	66.7	127
196	463499	5537200	17.58	0.20	3.1	<2	5.9	78	47.1	37717	0.7	61	14	1.0	0.7	118.5	0.10	2.97	62.1	121
197	459897	5536771	15.88	0.16	2.7	<2	1.1	71	44.4	35134	0.8	55	12	0.8	0.4	105.8	0.11	2.22	64.5	106
198	459457	5538684	22.77	0.18	3.9	<2	1.1	67	46.2	31562	0.8	58	12	0.8	0.7	111.0	0.12	2.36	59.1	111
199	461146	5538599	20.63	0.18	3.8	<2	1.4	71	46.4	35925	0.8	56	13	0.6	0.4	115.2	0.13	2.10	72.1	111
201	461679	5538430	32.88	0.19	2.7	<2	NM	55	38.2	27827	0.9	46	10	NM	NM	81.5	0.13	1.58	59.7	131
202	458167	5537901	16.78	0.07	1.4	<2	NM	48	21.6	20906	0.3	33	8	NM	NM	70.7	0.07	1.04	39.3	76
203	456955	5536885	19.05	0.11	3.6	<2	NM	48	27.4	25788	0.8	35	10	NM	NM	94.7	0.14	4.42	50.2	90
204	454774	5537890	4.76	<0.04	1.1	<2	NM	22	10.9	11936	0.3	16	4	NM	NM	50.1	0.04	2.00	21.5	32
205	453712	5538487	48.93	0.11	2.5	<2	NM	28	31.4	12649	1.0	25	7	NM	NM	49.2	0.12	1.07	28.1	69

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	--------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	--------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	--------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
206	452397	5539685	15.08	0.08	2.3	<2	NM	43	24.1	22407	0.6	34	9	NM	NM	88.6	0.08	3.80	37.3	86
207	454499	5536398	13.09	0.08	2.2	<2	NM	41	25.0	24252	0.6	32	8	NM	NM	90.2	0.06	4.21	41.7	77
208	455642	5535472	20.83	0.13	4.7	<2	NM	45	3<0.44	24430	0.6	35	24	NM	NM	92.4	0.29	4.80	42.5	103
209	455478	5534447	25.53	0.10	3.2	<2	NM	40	33.2	20498	0.9	32	11	NM	NM	92.9	0.16	6.94	43.7	78
211	456377	5534275	12.67	0.07	2.0	<2	NM	31	19.7	16916	0.5	24	9	NM	NM	71.2	0.07	4.33	28.0	64
212	456754	5533715	53.32	0.15	1.8	<2	NM	17	27.8	7515	1.0	15	6	NM	NM	89.1	0.09	13.83	22.8	71
213	457726	5535526	54.42	0.11	2.2	<2	NM	29	34.4	12864	1.5	27	6	NM	NM	63.3	0.15	2.08	29.8	67
214	457480	5533011	35.31	0.07	4.0	<2	NM	39	36.2	19487	1.3	39	11	NM	NM	82.2	0.17	6.37	42.4	73
215	459414	5533898	25.33	0.09	2.5	<2	NM	51	35.9	25120	0.8	44	11	NM	NM	97.7	0.13	7.67	46.9	92
216	459415	5533898	8.56	0.04	3.9	<2	NM	26	20.7	13721	0.6	21	7	NM	NM	53.2	0.08	1.99	26.5	38
217	460745	5533988	27.54	0.09	3.7	<2	NM	39	36.9	20042	1.1	34	11	NM	NM	74.3	0.15	6.73	40.4	78
218	460691	5532616	22.25	0.08	3.6	<2	NM	33	30.7	18232	1.0	30	9	NM	NM	64.4	0.12	5.58	32.5	70
219	462624	5533229	54.81	0.19	2.4	<2	NM	27	46.3	4109	2.8	29	4	NM	NM	77.5	0.12	2.67	43.5	66
221	461357	5530870	23.18	0.10	3.3	<2	NM	37	33.0	19445	0.9	32	10	NM	NM	75.9	0.13	7.68	37.6	68
222	461366	5529329	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
223	463274	5530324	18.33	0.10	4.0	<2	NM	46	33.5	24780	0.7	36	15	NM	NM	91.9	0.17	7.47	46.2	82
224	461965	5528491	21.88	0.10	3.3	<2	NM	53	34.6	28698	0.6	41	12	NM	NM	102.0	0.12	11.44	48.5	92
225	459202	5527751	41.03	0.11	2.3	<2	NM	28	38.0	14608	1.8	25	6	NM	NM	107.5	0.13	12.64	30.8	81
226	458836	5527004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
227	457907	5527016	49.14	0.12	3.1	<2	NM	34	40.2	23008	2.0	29	10	NM	NM	96.4	0.18	12.98	39.5	76
228	457862	5527588	64.66	0.10	2.2	<2	NM	16	31.3	9369	2.0	16	4	NM	NM	69.6	0.10	5.99	24.6	100
229	456493	5528522	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
231	455595	5526666	17.14	0.11	2.1	<2	NM	55	40.8	26569	0.6	47	14	NM	NM	111.4	0.15	12.05	45.5	93
232	455671	5525758	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
233	457769	5526184	49.1	0.16	2.1	<2	NM	25	42.9	13486	1.9	21	12	NM	NM	126.8	0.10	69.26	39.8	67
234	478771	5520534	42.07	0.05	9.2	<2	NM	12	12.5	4887	5.1	12	3	NM	NM	19.9	0.07	12.35	22.4	48
235	475204	5527399	55.34	0.09	2.2	<2	NM	22	16.7	14146	1.1	23	4	NM	NM	37.9	0.08	0.60	23.6	61
236	464698	5531923	18.18	0.12	4.6	<2	NM	52	44.9	29364	2.7	41	11	NM	NM	94.4	0.13	11.05	55.1	85
237	456485	5531355	28.98	0.11	2.9	<2	NM	39	35.2	19551	1.0	36	8	NM	NM	91.0	0.08	8.84	38.4	79
238	455122	5533791	29.48	0.12	3.3	<2	NM	42	41.5	21087	1.1	40	8	NM	NM	105.1	0.12	10.50	39.9	92
239	450979	5535722	25.26	0.13	2.3	<2	NM	45	27.2	23913	0.8	31	8	NM	NM	100.1	0.08	3.85	46.7	96
241	452268	5535481	33.32	0.11	1.8	<2	NM	33	37.4	14008	1.4	32	6	NM	NM	70.6	0.09	3.20	30.2	60
242	451592	5536921	15.3	0.10	2.1	<2	NM	44	27.2	22097	0.6	34	8	NM	NM	89.0	0.06	3.75	38.5	83
243	449345	5538158	44.5	0.11	3.1	<2	NM	24	23.9	10674	1.5	17	7	NM	NM	77.7	0.13	1.98	21.7	58
244	446856	5537910	20.42	0.12	2.4	<2	NM	50	31.3	24126	0.7	40	9	NM	NM	100.6	0.06	3.78	40.8	106
245	447693	5537892	23.27	0.12	1.9	<2	NM	47	28.1	21618	0.6	34	9	NM	NM	90.9	0.08	3.11	39.4	88
246	446369	5536926	22.03	0.13	2.9	<2	NM	58	32.3	30756	0.9	47	8	NM	NM	112.4	0.09	4.52	54.7	111
247	447061	5536195	53.57	0.10	2.0	<2	NM	30	37.0	19382	1.4	27	7	NM	NM	59.4	0.15	2.17	27.8	81
248	447259	5535855	53.47	0.12	3.9	<2	NM	33	31.0	21154	1.7	24	7	NM	NM	69.1	0.18	2.14	39.9	80
249	447388	5535460	63.5	0.08	1.6	<2	NM	19	25.1	4677	1.1	23	4	NM	NM	30.9	0.11	2.67	14.3	46
251	447637	5535432	57.62	0.08	1.5	<2	NM	20	30.1	4216	1.1	29	4	NM	NM	39.5	0.10	3.75	13.3	39
252	448153	5535215	54.41	0.10	2.3	<2	NM	29	31.5	13395	1.6	22	6	NM	NM	48.9	0.13	3.83	28.9	54
253	448552	5534803	46.31	0.09	2.3	<2	NM	37	28.4	16252	1.4	26	5	NM	NM	69.0	0.10	4.64	31.5	59
254	448405	5533969	53.97	0.08	1.5	<2	NM	10	21.1	4083	1.2	13	2	NM	NM	29.8	0.09	2.24	10.3	39
255	448856	5535798	51.55	0.10	2.2	<2	NM	26	3<0.43	12386	1.8	20	6	NM	NM	54.8	0.11	2.78	30.7	49
256	449202	5535373	55.69	0.08	1.9	<2	NM	30	22.5	9544	1.2	33	5	NM	NM	74.6	0.10	4.52	16.5	57

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
257	449498	5535272	57.48	0.08	2.7	<2	NM	28	23.5	8955	1.2	28	8	NM	NM	69.7	0.16	4.15	16.9	57
258	449108	5536436	58.01	0.09	2.6	<2	NM	21	27.3	9077	1.3	18	5	NM	NM	45.8	0.12	1.39	22.2	64
259	445424	5536410	57.09	0.08	2.4	<2	NM	24	30.8	10604	1.1	22	5	NM	NM	49.5	0.11	1.17	27.6	59
261	445556	5536211	41.76	0.10	3.3	<2	NM	41	52.3	19515	1.7	33	8	NM	NM	63.8	0.18	1.74	42.7	76
262	444576	5536963	24.26	0.09	1.7	<2	NM	45	31.1	21423	1.1	39	7	NM	NM	96.8	0.08	4.00	39.0	80
263	445198	5538284	35.28	0.06	1.4	<2	NM	17	10.2	5181	0.5	16	5	NM	NM	42.3	0.06	1.39	13.9	56
264	443597	5538862	37.3	0.05	1.5	<2	NM	12	11.8	3880	0.5	11	4	NM	NM	36.8	0.08	1.39	6.8	32
265	442291	5538929	35.9	<0.04	2.7	<2	NM	17	9.1	7482	0.4	15	4	NM	NM	35.0	0.05	0.92	10.1	39
266	439106	5538454	65.78	0.11	1.6	<2	NM	25	23.9	9391	1.2	18	3	NM	NM	84.7	0.11	2.32	16.8	60
267	439434	5537910	48.16	0.16	3.1	<2	NM	29	30.8	15519	1.3	19	6	NM	NM	94.9	0.17	2.50	35.6	67
268	440143	5537594	61.58	0.15	2.5	<2	NM	25	30.1	20457	1.5	18	5	NM	NM	72.7	0.10	1.80	51.9	66
269	439961	5537049	30.45	0.15	2.2	<2	NM	57	36.2	22470	1.0	43	8	NM	NM	114.8	0.09	4.01	39.7	109
271	439988	5538478	24.8	0.09	1.4	<2	NM	31	20.1	15468	0.7	21	5	NM	NM	100.7	0.08	2.84	25.1	59
272	440936	5537962	38.45	0.09	2.6	<2	NM	24	29.1	11452	1.8	20	6	NM	NM	82.0	0.22	3.51	22.9	54
273	441529	5537784	51.39	0.09	2.5	<2	NM	24	20.7	11804	1.2	16	5	NM	NM	63.9	0.21	1.88	22.1	64
274	441975	5537048	28.04	0.14	4.3	<2	0.5	72	38.6	33080	1.1	55	8	0.6	0.3	132.8	0.09	4.93	57.0	135
275	442796	5536523	57.28	0.23	1.9	<2	NM	52	48.1	25874	1.5	38	6	NM	NM	79.0	0.12	1.87	61.3	77
276	443805	5535742	40.53	0.13	2.4	<2	NM	34	25.0	12833	1.4	23	7	NM	NM	90.0	0.14	4.86	38.5	68
277	444736	5535692	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
278	444857	5535312	44.13	0.12	2.0	<2	NM	34	29.1	20484	1.8	28	5	NM	NM	85.5	0.12	4.21	40.4	87
279	445417	5534730	55.93	0.13	2.6	<2	NM	27	36.5	9966	1.4	28	5	NM	NM	121.3	0.14	6.53	19.8	61
281	446186	5534589	40.01	0.09	2.4	<2	NM	36	23.9	15454	1.0	29	8	NM	NM	75.3	0.14	5.06	32.8	59
282	447143	5534226	50.29	0.09	1.8	<2	NM	31	27.8	12280	1.2	27	5	NM	NM	83.2	0.11	6.72	26.6	50
283	446703	5533742	55.05	0.10	1.7	<2	NM	30	30.7	10956	1.6	28	4	NM	NM	88.8	0.09	7.29	24.3	55
284	443492	5534808	43	0.08	2.1	<2	NM	32	20.7	15078	1.1	23	8	NM	NM	77.0	0.19	2.57	27.9	59
285	438547	5537298	32.71	0.18	3.3	<2	NM	46	31.6	24658	1.1	30	10	NM	NM	103.7	0.14	3.31	50.7	85
286	438819	5536451	37.25	0.10	2.2	<2	NM	35	48.7	18530	1.9	33	9	NM	NM	76.6	0.14	2.57	30.5	71
287	439063	5535932	16.96	0.05	1.4	<2	NM	23	17.6	10580	0.7	20	4	NM	NM	59.8	0.07	2.59	18.3	53
288	440249	5536074	53.08	0.11	2.0	<2	NM	28	27.5	9894	1.1	23	6	NM	NM	57.5	0.13	1.85	24.3	58
289	440018	5535630	45.59	0.16	2.7	<2	NM	27	38.0	21012	1.5	25	6	NM	NM	69.2	0.14	5.96	42.6	59
291	441711	5535629	10.65	0.04	1.3	<2	NM	16	8.2	11457	0.5	10	3	NM	NM	37.8	0.04	2.03	15.2	37
292	441211	5535023	31.6	0.09	1.5	<2	NM	31	23.0	15051	0.9	20	6	NM	NM	83.3	0.12	4.50	26.4	61
293	441208	5534138	43.04	0.09	2.1	<2	NM	17	15.8	5736	0.6	11	5	NM	NM	36.8	0.12	3.64	14.3	36
294	443516	5533140	26.44	0.07	3.0	<2	NM	33	19.2	18717	0.9	24	7	NM	NM	101.2	0.09	4.52	28.5	68
295	444278	5533604	29.68	0.10	2.6	<2	NM	42	25.6	25677	1.1	24	6	NM	NM	112.6	0.09	4.91	44.5	78
296	445443	5532883	31.9	0.08	2.4	<2	NM	25	38.9	13978	1.9	25	5	NM	NM	58.8	0.18	3.35	27.6	56
297	450258	5534321	35.49	0.11	2.4	<2	NM	41	25.8	19592	0.8	28	8	NM	NM	92.3	0.13	3.03	44.7	79
298	450934	5533765	33.17	0.12	2.2	<2	NM	45	26.0	19103	0.7	31	8	NM	NM	95.1	0.11	3.11	45.8	83
299	461492	5524704	39.29	0.14	3.7	<2	NM	35	49.0	15519	1.1	37	8	NM	NM	76.1	0.12	13.64	32.8	75
301	477461	5516053	6.94	0.06	2.1	<2	NM	46	33.8	23290	0.6	35	10	NM	NM	82.4	0.09	1.93	44.1	62
302	481487	5514477	13.78	0.14	2.1	<2	1.4	67	31.5	34806	0.4	51	12	0.5	0.4	96.8	0.07	3.55	55.2	118
303	461533	5525735	20.46	0.13	3.2	<2	NM	51	38.8	32839	0.9	40	10	NM	NM	117.2	0.08	27.47	47.1	98
304	455029	5530762	19.29	0.11	3.6	<2	NM	51	28.7	28088	0.6	38	9	NM	NM	113.0	0.07	7.18	47.8	103
305	453251	5530429	25.94	0.11	1.8	<2	NM	47	25.3	23264	0.6	33	8	NM	NM	95.9	0.06	6.23	40.3	93
306	454278	5532173	19.26	0.05	3.3	<2	NM	32	19.4	16862	0.6	25	6	NM	NM	73.6	0.08	2.29	30.0	89
307	453069	5532720	9.03	<0.04	1.0	<2	NM	21	9.8	11668	0.4	13	3	NM	NM	59.9	0.04	2.10	20.1	38

[illegible]	[illegible]	[illegible]	LOI	Ag	As	As	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
		[illegible]	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
		[illegible]	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
		[illegible]	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
[illegible]	[illegible]	[illegible]	40.98	0.15	3.1	<2	NM	36	35.0	10274	1.6	36	5	NM	NM	151.0	0.10	13.67	25.1	66
[illegible]	[illegible]	[illegible]	53.38	0.05	2.1	<2	NM	29	29.7	12916	2.2	36	5	NM	NM	78.3	0.11	3.63	24.4	60
[illegible]	[illegible]	[illegible]	47.39	0.07	2.9	<2	NM	24	42.1	12937	4.1	37	4	NM	NM	101.8	0.11	5.50	18.9	81
[illegible]	[illegible]	[illegible]	65.22	0.05	2.1	<2	NM	15	24.4	5862	1.1	18	4	NM	NM	35.5	0.10	2.37	15.5	63
[illegible]	[illegible]	[illegible]	24.49	0.08	2.0	<2	NM	30	23.4	12959	0.6	25	6	NM	NM	76.2	0.07	3.02	28.5	54
[illegible]	[illegible]	[illegible]	42.73	0.08	3.4	<2	NM	26	47.2	7511	1.9	44	8	NM	NM	106.2	0.19	4.89	11.2	84
[illegible]	[illegible]	[illegible]	37.48	0.12	2.4	<2	NM	39	33.6	16902	1.0	25	7	NM	NM	91.4	0.12	4.08	31.5	70
[illegible]	[illegible]	[illegible]	59.03	0.08	2.3	<2	NM	27	28.6	11207	1.1	18	5	NM	NM	48.5	0.13	1.39	22.5	66
[illegible]	[illegible]	[illegible]	34.28	0.13	3.9	<2	NM	48	38.8	44686	2.5	32	7	NM	NM	113.5	0.10	6.04	51.6	118
[illegible]	[illegible]	[illegible]	54.26	0.11	2.5	<2	NM	29	23.5	16223	1.2	19	6	NM	NM	101.8	0.15	1.99	31.3	70
[illegible]	[illegible]	[illegible]	28.13	0.11	2.8	2	NM	40	23.9	32886	0.9	25	6	NM	NM	138.8	0.08	2.24	43.9	88
[illegible]	[illegible]	[illegible]	30.47	0.15	2.0	<2	NM	44	33.3	23933	0.9	34	7	NM	NM	130.0	0.08	3.24	48.6	95
[illegible]	[illegible]	[illegible]	56.71	0.14	1.7	<2	1.9	19	128.0	19373	1.3	22	4	0.1	0.1	53.5	0.10	1.26	24.2	85
[illegible]	[illegible]	[illegible]	34.87	0.15	1.8	<2	NM	47	37.3	24014	0.9	35	7	NM	NM	133.5	0.11	3.26	48.2	94
[illegible]	[illegible]	[illegible]	53.5	0.17	2.2	<2	NM	29	31.6	18650	1.5	17	7	NM	NM	99.8	0.14	1.47	77.4	67
[illegible]	[illegible]	[illegible]	53.22	0.15	2.2	<2	NM	22	27.8	26406	1.3	16	4	NM	NM	70.3	0.08	1.56	29.7	53
[illegible]	[illegible]	[illegible]	48.65	0.15	2.7	<2	NM	61	32.6	14948	1.0	35	6	NM	NM	95.2	0.15	2.31	41.0	103
[illegible]	[illegible]	[illegible]	61.74	0.07	2.1	<2	NM	25	15.6	3826	1.1	19	4	NM	NM	52.1	0.14	1.62	16.8	63
[illegible]	[illegible]	[illegible]	49.33	0.16	2.8	<2	NM	29	33.4	17149	1.5	21	6	NM	NM	92.6	0.15	2.13	41.7	55
[illegible]	[illegible]	[illegible]	59.06	0.10	2.5	<2	NM	19	25.1	12857	1.4	19	5	NM	NM	56.8	0.13	1.79	29.1	56
[illegible]	[illegible]	[illegible]	44.61	0.13	2.3	<2	NM	33	31.9	15909	1.3	25	5	NM	NM	124.0	0.13	2.54	36.6	75
[illegible]	[illegible]	[illegible]	47.66	0.06	1.3	<2	NM	11	11.5	4165	0.7	13	4	NM	NM	79.6	0.09	2.47	12.8	35
[illegible]	[illegible]	[illegible]	32.88	0.14	2.5	<2	NM	36	24.0	22222	1.1	25	8	NM	NM	110.3	0.10	2.03	50.0	85
[illegible]	[illegible]	[illegible]	24.25	0.17	3.8	<2	NM	52	48.1	27481	1.4	39	8	NM	NM	161.2	0.14	4.04	49.1	85
[illegible]	[illegible]	[illegible]	47.53	0.12	2.0	<2	NM	25	20.5	7664	0.9	16	6	NM	NM	64.0	0.13	1.94	33.3	57
[illegible]	[illegible]	[illegible]	33.2	0.12	4.7	<2	NM	50	29.2	53281	3.4	36	8	NM	NM	137.8	0.12	4.27	63.4	165
[illegible]	[illegible]	[illegible]	41.17	0.09	1.3	<2	NM	19	24.0	4797	0.8	14	4	NM	NM	35.6	0.06	1.56	11.6	36
[illegible]	[illegible]	[illegible]	50.79	0.11	1.9	<2	NM	19	23.4	9701	0.8	15	7	NM	NM	50.4	0.09	3.69	22.0	46
[illegible]	[illegible]	[illegible]	46.14	0.14	2.2	<2	NM	20	25.6	13569	1.0	15	5	NM	NM	90.8	0.11	1.76	40.8	50
[illegible]	[illegible]	[illegible]	57.59	0.09	2.0	<2	NM	30	28.7	26078	1.8	24	3	NM	NM	68.2	0.13	2.54	31.2	64
[illegible]	[illegible]	[illegible]	23.39	0.07	1.8	<2	NM	31	18.9	13507	0.7	24	6	NM	NM	81.3	0.08	2.57	22.8	61
[illegible]	[illegible]	[illegible]	31.94	0.14	5.3	<2	NM	42	29.9	45191	2.1	27	11	NM	NM	108.1	0.20	5.11	56.6	100
[illegible]	[illegible]	[illegible]	31.16	0.10	2.3	<2	NM	40	29.6	15686	0.7	30	8	NM	NM	90.7	0.13	2.83	36.3	67
[illegible]	[illegible]	[illegible]	38.03	0.15	3.0	<2	NM	42	38.1	25288	1.3	26	7	NM	NM	100.0	0.12	4.08	47.9	72
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	36.17	0.10	2.0	<2	NM	33	29.8	14092	0.9	30	6	NM	NM	94.0	0.08	4.05	23.2	68
[illegible]	[illegible]	[illegible]	59.51	0.07	1.2	<2	NM	17	25.6	3838	0.7	17	2	NM	NM	40.5	0.08	2.79	9.3	37
[illegible]	[illegible]	[illegible]	32.47	0.09	1.9	<2	NM	35	22.1	11754	0.8	22	5	NM	NM	80.2	0.06	3.02	30.4	68
[illegible]	[illegible]	[illegible]	42.02	0.07	1.4	<2	NM	25	17.4	6781	0.6	16	5	NM	NM	52.5	0.04	1.87	14.3	63
[illegible]	[illegible]	[illegible]	41.40	0.09	1.6	<2	NM	18	16.1	6805	1.0	11	5	NM	NM	39.3	0.06	1.48	16.9	43
[illegible]	[illegible]	[illegible]	33.19	0.09	1.9	<2	NM	17	12.9	6664	0.5	19	5	NM	NM	39.2	0.08	1.27	12.7	58
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	53.96	0.18	3.5	<2	0.5	23	70.4	37432	2.5	22	6	0.2	0.3	91.3	0.11	4.19	57.7	64
[illegible]	[illegible]	[illegible]	63.07	0.11	2.8	<2	NM	22	48.1	11719	1.2	33	5	NM	NM	156.4	0.10	3.42	33.3	77
[illegible]	[illegible]	[illegible]	54.24	0.12	2.9	<2	NM	20	37.2	15382	1.9	18	6	NM	NM	81.8	0.15	4.08	32.8	77
[illegible]	[illegible]	[illegible]	49.7	0.11	2.8	<2	NM	26	35.0	17786	1.0	26	10	NM	NM	100.9	0.17	3.05	41.6	66

			LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			Gravi	WS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
			%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
			44.33	0.11	3.2	<2	NM	28	31.5	15944	1.2	20	11	NM	NM	101.2	0.23	2.66	39.3	74
			52.19	0.07	2.2	<2	NM	14	21.6	5974	0.8	15	4	NM	NM	43.4	0.05	1.20	11.8	53
			42.81	0.13	6.5	<2	NM	23	26.7	19712	1.1	21	33	NM	NM	68.3	0.61	1.92	33.0	87
			52.07	0.17	4.8	<2	NM	28	39.5	36785	1.8	25	13	NM	NM	87.3	0.21	2.64	58.9	63
			42.65	0.09	2.6	<2	NM	24	27.3	11406	1.1	19	7	NM	NM	77.6	0.17	2.47	23.6	67
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			63.26	0.06	1.9	<2	NM	20	32.9	7064	1.8	30	6	NM	NM	67.3	0.16	2.30	17.9	73
			42.11	0.14	2.4	<2	NM	25	32.4	14389	1.0	21	11	NM	NM	64.2	0.14	2.16	34.1	68
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			44.65	0.09	2.5	<2	NM	24	27.3	10616	1.3	22	9	NM	NM	79.5	0.14	3.01	26.4	71
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			26.58	0.11	3.8	<2	NM	38	25.1	46806	2.2	30	8	NM	NM	108.5	0.10	5.22	51.3	111
			47.37	0.09	2.1	<2	NM	28	33.2	11829	1.8	32	6	NM	NM	92.5	0.15	3.98	19.5	79
			51.05	0.09	3.1	<2	NM	26	23.7	13898	1.1	26	8	NM	NM	82.5	0.13	2.86	20.8	66
			50.75	0.18	3.3	<2	NM	29	36.2	14299	1.6	19	9	NM	NM	76.3	0.16	3.89	27.0	58
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			43.9	0.06	1.9	<2	NM	15	19.2	6239	0.6	18	7	NM	NM	52.4	0.12	1.76	15.3	49
			5.13	<0.04	1.4	<2	NM	13	7.5	11509	0.5	10	2	NM	NM	38.4	0.03	1.37	17.1	33
			51.16	0.08	3.2	<2	NM	33	27.4	26862	1.4	27	8	NM	NM	108.7	0.11	4.08	33.7	99
			42.73	0.20	7.3	<2	NM	31	33.9	25768	1.5	23	23	NM	NM	95.5	0.35	3.72	46.5	75
			43.9	0.13	3.1	<2	NM	23	27.4	12302	1.0	21	17	NM	NM	79.2	0.25	2.97	31.0	65
			37.1	0.09	3.1	<2	NM	23	25.6	13836	1.0	25	10	NM	NM	96.3	0.14	3.50	20.8	76
			54.47	0.09	2.6	<2	NM	16	24.2	8654	1.1	20	5	NM	NM	68.2	0.13	2.08	19.4	57
			50.95	0.08	3.1	<2	NM	13	23.5	5969	0.8	19	7	NM	NM	66.5	0.15	1.95	16.9	49
			46.78	0.13	3.3	<2	NM	29	35.4	18252	2.0	21	7	NM	NM	108.7	0.15	3.83	41.1	62
			43.64	0.13	3.4	<2	NM	26	30.6	21039	1.4	21	8	NM	NM	111.7	0.16	3.32	43.3	62
			54.06	0.17	5.2	<2	NM	29	38.0	34007	2.9	24	12	NM	NM	109.7	0.22	3.33	42.2	77
			45.06	0.13	2.9	<2	NM	24	30.4	12910	1.1	21	8	NM	NM	97.0	0.17	3.18	28.3	71
			50.57	0.07	2.1	<2	NM	16	19.3	9063	1.2	17	6	NM	NM	68.7	0.14	2.29	20.8	62
			51.58	0.11	3.4	<2	NM	18	32.2	12770	1.6	17	7	NM	NM	83.8	0.14	3.07	25.2	57
			46.32	0.08	2.3	<2	NM	10	22.6	4861	1.1	14	7	NM	NM	63.1	0.16	3.98	14.5	43
			37.40	0.13	INF	INF	NM	30	29.9	17104	1.3	21	14	NM	NM	110.4	0.22	6.32	32.7	67
			43.73	0.07	1.6	<2	NM	8	18.0	3484	1.1	9	5	NM	NM	32.9	0.11	5.11	10.9	28
			56.78	0.08	2.6	<2	NM	15	24.5	9035	1.2	23	7	NM	NM	75.1	0.13	3.48	20.4	62
			54.47	0.10	2.5	<2	NM	18	25.7	12445	1.3	25	8	NM	NM	99.7	0.16	7.54	23.9	60
			58.03	0.02	2.2	<2	NM	12	20.7	6721	0.9	16	4	NM	NM	34.5	0.09	1.14	19.2	60
			47.22	0.07	2.1	<2	NM	13	23.1	5919	0.7	17	4	NM	NM	38.7	0.08	1.39	17.5	54
			55.2	1.08	2.4	<2	NM	16	29.4	9087	1.1	26	6	NM	NM	76.2	0.13	2.91	22.4	58
			60.94	0.11	2.2	<2	NM	15	39.8	14444	1.0	17	4	NM	NM	96.5	0.08	2.14	42.0	52
			47.42	0.14	3.0	<2	NM	32	34.4	16195	1.1	33	7	NM	NM	56.6	0.11	2.69	32.4	106
			37.94	0.10	2.9	<2	NM	33	48.8	17966	1.6	30	7	NM	NM	81.3	0.11	2.00	33.1	65
			50.05	0.17	4.3	<2	0.5	23	55.0	12399	2.3	26	11	0.1	0.1	72.2	0.20	2.46	28.7	82
			49.72	0.11	3.0	<2	NM	13	41.8	5156	0.9	19	5	NM	NM	46.8	0.12	1.53	14.3	42
			49.12	0.10	3.5	<2	NM	12	51.8	5222	1.3	21	3	NM	NM	55.7	0.14	2.25	12.6	42
			49.7	0.20	3.1	<2	0.4	14	65.4	13976	1.4	19	4	0.3	0.3	53.9	0.12	1.16	26.9	60

			Ag	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			Ag	SFS	RWA	RNA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
			%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.05	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			18.1	0.13	2.3	<2	1.4	64	31.2	34636	0.7	51	11	0.3	0.7	103.8	0.08	1.98	52.4	133
			19.22	0.13	2.6	<2	0.5	77	39.3	41793	0.9	58	14	0.6	0.8	131.2	0.10	2.49	65.8	145
			13.68	0.13	2.4	<2	NM	60	31.8	32462	0.7	48	11	NM	NM	97.3	0.09	1.68	51.8	118
			19	0.15	2.0	<2	NM	62	37.5	32502	1.0	47	14	NM	NM	102.6	0.13	1.93	57.6	120
			27.28	0.19	2.2	<2	NM	41	33.2	23466	1.8	35	8	NM	NM	65.5	0.10	1.32	39.0	141
			17.27	0.15	2.2	<2	0.5	60	35.3	33301	0.7	50	11	0.7	0.7	105.4	0.08	1.51	52.5	116
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			60.46	0.13	3.6	<2	NM	34	41.5	17044	4.5	38	6	NM	NM	86.9	0.15	2.29	34.6	118
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			54.05	0.15	2.9	<2	NM	16	51.3	5674	1.5	21	4	NM	NM	77.0	0.13	2.97	14.5	43
			72.21	0.13	4.3	<2	NM	12	30.4	12140	1.5	15	11	NM	NM	35.0	0.30	0.88	17.9	62
			21.22	0.14	2.9	<2	NM	53	37.7	28473	1.1	45	9	NM	NM	106.4	0.07	2.38	43.5	124
			31.29	0.20	2.3	<2	NM	44	45.5	22776	1.3	36	9	NM	NM	102.8	0.10	2.29	44.8	115
			12.15	0.10	2.6	<2	NM	41	42.7	20943	1.2	34	8	NM	NM	93.8	0.08	2.34	38.6	104
			62.09	0.08	2.5	<2	NM	24	36.8	8622	0.8	27	5	NM	NM	91.7	0.11	3.59	16.6	49
			8.74	0.05	2.0	<2	NM	20	20.6	11502	3.4	17	4	NM	NM	45.9	0.09	1.67	21.1	49
			61.22	0.16	2.4	<2	NM	24	42.7	13277	1.8	19	6	NM	NM	53.7	0.09	1.46	30.8	61
			58.48	0.13	2.6	<2	NM	19	61.1	19683	1.9	21	6	NM	NM	76.4	0.16	2.66	33.8	73
			57.08	0.29	1.9	<2	NM	13	57.7	14246	1.9	18	5	NM	NM	62.2	0.12	1.91	36.8	53
			47.37	0.23	3.2	<2	1.8	33	90.5	13666	1.9	35	6	1.4	1.0	105.4	0.15	3.28	32.8	90
			58.1	0.14	2.5	<2	NM	19	52.3	12860	3.1	19	7	NM	NM	52.1	0.16	1.11	35.8	69
			71.07	0.08	1.6	<2	NM	9	76.2	9720	1.2	17	4	NM	NM	40.0	0.15	0.86	18.8	46
			15.8	0.07	1.4	<2	NM	6	42.8	5583	1.1	13	3	NM	NM	24.1	0.13	0.59	15.9	41
			52.68	0.15	3.0	<2	2.3	35	64.1	18033	1.5	30	10	2.5	1.3	71.5	0.16	1.75	33.8	75
			61.21	0.13	1.7	<2	NM	6	32.6	4512	4.4	11	3	NM	NM	32.9	0.11	1.35	10.0	52
			60.18	0.14	4.2	<2	4.1	31	97.4	11996	6.4	31	6	2.1	4.0	60.3	0.19	1.68	28.2	70
			62.24	0.09	2.3	<2	NM	17	43.3	9071	0.8	21	5	NM	NM	43.7	0.09	1.39	15.3	44
			22.47	0.14	4.2	<2	2.0	39	60.8	23589	1.4	36	6	1.1	1.0	82.3	0.11	1.91	43.5	100
			58.65	0.15	3.3	<2	4.3	19	94.4	9725	1.7	30	4	1.2	0.5	56.8	0.14	1.68	20.4	65
			29.62	0.16	2.7	<2	1.6	34	63.6	18363	1.3	31	7	1.0	0.6	82.9	0.12	1.84	38.6	84
			29.50	0.15	2.8	<2	5.8	34	58.6	17860	0.8	34	7	1.1	0.7	68.9	0.11	1.49	41.0	79
			63.08	0.14	2.3	<2	2.1	14	52.8	12656	1.4	20	5	0.7	0.1	43.4	0.13	0.98	33.9	72
			29.02	0.16	3.0	<2	4.0	50	96.5	24925	1.4	52	8	1.5	1.0	131.6	0.15	5.16	47.9	107
			29.22	0.18	2.9	<2	3.5	36	65.9	17100	0.9	34	9	0.3	0.4	92.9	0.12	1.95	36.8	90
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			62.5	0.15	3.3	<2	1.6	24	68.4	12197	1.5	33	5	1.1	0.3	70.7	0.18	2.34	29.6	76
			59.54	0.25	2.1	<2	1.3	57	74.1	20614	1.6	32	11	0.9	0.4	104.4	0.16	2.19	54.4	95
			61.83	0.18	2.9	<2	0.9	28	60.8	15964	0.9	32	6	1.0	0.3	89.8	0.10	2.38	27.9	66
			62.94	0.17	4.1	<2	1.3	32	65.2	20619	1.0	34	7	1.0	0.4	101.6	0.11	2.31	40.2	87
			33.2	0.10	1.9	<2	NM	16	53.2	6108	1.1	18	4	NM	NM	40.2	0.13	1.17	14.9	98
			64.37	0.16	2.9	<2	NM	30	53.0	15386	0.8	35	5	NM	NM	80.4	0.08	1.68	27.8	92
			45.14	0.15	2.6	<2	NM	21	55.0	14445	1.1	21	6	NM	NM	67.3	0.14	1.68	35.8	60
			39.89	0.14	2.6	<2	NM	28	50.0	15412	0.7	23	7	NM	NM	63.8	0.09	1.26	33.8	79
			61.03	0.26	4.2	<2	0.5	32	66.2	29105	3.6	29	8	2.9	1.3	124.3	0.21	3.57	63.2	73
			49.79	0.20	3.1	<2	0.5	32	51.2	12744	2.3	31	6	0.5	0.7	104.0	0.17	4.09	29.1	71

			Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			WS	RWA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES	
			%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
			97.04	0.11	2.1	<2	NM	35	25.1	15403	1.3	32	7	NM	NM	61.9	0.10	1.37	33.7	65
			25.46	0.17	2.2	<2	NM	50	35.7	27475	0.8	41	9	NM	NM	73.8	0.11	1.30	46.5	113
			40.17	0.25	4.1	<2	NM	47	55.3	27693	1.8	47	10	NM	NM	86.7	0.14	1.71	62.0	145
			40.48	0.19	3.7	<2	NM	29	33.6	19761	2.3	29	9	NM	NM	72.7	0.18	5.45	37.0	89
			39.65	0.13	3.6	<2	NM	24	25.3	13968	1.1	22	7	NM	NM	62.4	0.11	14.61	29.0	87
			57.18	0.26	3.7	<2	NM	28	47.0	12369	2.1	45	7	NM	NM	170.4	0.12	9.10	17.3	68
			48.1	0.11	2.9	<2	NM	25	41.1	15345	1.2	24	7	NM	NM	122.4	0.13	10.19	30.3	68
			77.13	0.05	3.0	<2	NM	14	4<0.44	6699	2.3	21	6	NM	NM	92.6	0.28	6.29	16.5	68
			40.23	0.15	2.1	2	NM	25	49.4	14559	1.4	23	5	NM	NM	184.0	0.16	17.06	30.9	63
			39.91	0.10	4.0	<2	NM	25	30.2	13794	1.1	21	7	NM	NM	112.0	0.14	13.25	27.5	61
			66.02	0.08	1.7	<2	NM	12	23.5	4293	0.8	18	5	NM	NM	81.8	0.08	14.50	9.1	44
			26.14	0.11	2.1	<2	NM	27	32.9	17064	0.8	19	9	NM	NM	102.6	0.14	8.12	30.4	66
			34.01	0.15	3.8	<2	NM	24	32.3	12530	0.8	18	16	NM	NM	93.1	0.32	7.00	25.8	62
			32.60	0.09	2.4	<2	NM	28	14.1	20348	1.0	12	7	NM	NM	84.7	0.16	2.70	73.0	46
			32.72	0.09	2.8	<2	NM	27	22.2	15521	0.9	18	6	NM	NM	97.6	0.11	3.90	30.8	60
			38.78	0.09	2.1	<2	NM	29	26.1	14435	0.9	20	6	NM	NM	112.0	0.09	4.50	28.4	66
			30.17	0.07	1.4	<2	NM	25	20.9	12156	0.9	18	4	NM	NM	99.0	0.06	3.41	22.5	70
			27.5	0.07	2.6	<2	NM	17	21.0	8809	1.2	18	5	NM	NM	96.2	0.10	3.46	24.1	50
															NM	108.6	0.06	4.47	27.5	73
483	429738	5525706	32.02	0.11	3.6	<2	NM	36	25.8	42084	1.6	26	10	NM	NM	120.7	0.16	9.08	44.5	82
484	429804	5525042	45.05	0.08	1.0	<2	NM	23	22.2	12127	0.7	19	5	NM	NM	90.4	0.07	3.43	30.5	72
485	427982	5523530	35.68	0.09	1.9	<2	NM	31	23.8	21432	0.9	29	6	NM	NM	135.2	0.09	8.25	35.8	86
486	429462	5522813	36.85	0.14	2.6	<2	NM	32	32.4	19833	1.0	23	8	NM	NM	153.6	0.12	13.44	49.7	89
487	429161	5522268	25.4	0.09	2.2	<2	NM	26	30.2	15172	0.7	22	8	NM	NM	105.1	0.13	12.78	27.6	61
488	428414	5519328	75.02	0.07	1.9	<2	NM	22	37.6	9076	3.1	26	4	NM	NM	73.0	0.09	25.04	14.1	58
489	428128	5519543	53.86	0.18	11.0	<2	NM	24	50.1	20305	3.5	21	40	NM	NM	78.7	0.63	23.15	36.6	78
491	429162	5518182	35.48	0.10	2.4	<2	NM	14	25.0	8172	1.8	14	14	NM	NM	90.4	0.19	72.09	17.6	81
492	427479	5517716	35.51	0.10	2.3	<2	NM	28	20.9	13876	0.8	19	8	NM	NM	86.0	0.11	11.76	30.9	61
493	428775	5517825	44.29	0.06	2.0	<2	NM	19	18.6	8217	1.0	19	6	NM	NM	82.2	0.13	11.73	16.9	69
494	431215	5516983	57.5	0.05	1.9	<2	NM	11	11.7	7493	0.6	11	7	NM	NM	48.4	0.11	6.15	10.8	38
495	431083	5516565	59.96	0.06	2.0	<2	NM	11	14.3	4565	1.0	16	4	NM	NM	57.7	0.08	7.24	7.8	28
496	430733	5517251	61.32	0.07	2.9	<2	NM	16	17.4	8897	0.8	13	8	NM	NM	58.1	0.17	6.91	16.5	51
497	430917	5517941	20.79	0.08	2.6	<2	NM	30	20.6	18370	1.2	22	6	NM	NM	97.6	0.08	12.44	33.0	82
498	430260	5517446	34.98	0.09	3.1	<2	NM	30	24.1	20170	1.1	19	8	NM	NM	100.7	0.12	12.93	39.2	73
499	429759	5517306	38.74	0.16	3.4	<2	NM	28	25.8	27827	2.2	20	13	NM	NM	111.5	0.16	21.48	58.1	73
501	429946	5516029	41.44	0.10	2.3	<2	NM	24	20.5	15416	1.0	20	8	NM	NM	83.7	0.15	9.15	37.9	59
502	429635	5516181	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
503	430520	5514485	41.33	0.11	3.0	<2	NM	21	25.4	10481	1.5	17	7	NM	NM	117.4	0.16	10.12	25.8	63
504	431157	5513711	44.7	0.09	2.3	<2	NM	19	19.5	12625	1.5	14	5	NM	NM	72.2	0.14	5.84	22.4	59
505	432390	5513429	28.96	0.09	2.0	<2	NM	24	19.3	12582	1.1	17	6	NM	NM	87.4	0.08	10.99	24.7	73
506	429492	5513895	32	0.10	2.2	<2	NM	28	3<0.43	10850	0.9	18	7	NM	NM	84.8	0.11	19.01	19.9	62
507	429830	5512662	42.85	0.10	2.0	<2	NM	20	21.9	12769	1.3	15	6	NM	NM	95.7	0.12	15.04	30.1	63
508	432299	5512446	41.77	0.14	2.3	<2	NM	28	26.4	14554	1.8	20	8	NM	NM	116.4	0.14	25.82	35.0	71
509	432766	5512027	13.99	0.27	2.6	<2	NM	29	15.0	18069	1.2	23	5	NM	NM	103.4	0.07	29.39	28.4	82
511	429682	5511962	41.2	0.09	2.9	<2	NM	24	22.8	14023	1.6	18	9	NM	NM	81.2	0.19	20.75	30.9	64
512	429197	5512274	23.05	0.10	5.3	<2	NM	28	28.4	44147	2.5	30	10	NM	NM	119.8	0.13	39.38	46.0	131

			Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
			ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
			51.58	0.09	2.2	<2	NM	13	18.9	6941	1.2	13	7	NM	NM	63.4	0.12	6.02	19.4	47
			27.39	0.10	2.8	<2	NM	35	24.3	51116	2.1	24	8	NM	NM	115.5	0.11	22.68	49.5	101
			40.29	0.28	6.4	<2	11.9	58	57.5	61839	3.3	41	18	1.4	1.0	154.8	0.17	44.89	69.9	85
			20.94	0.10	4.7	<2	NM	33	43.3	30718	1.8	40	13	NM	NM	148.4	0.20	33.67	43.1	85
			47.89	0.08	1.7	<2	NM	32	30.5	52337	2.0	21	6	NM	NM	136.5	0.11	6.83	42.3	57
			24.56	0.14	5.8	<2	NM	45	63.3	37008	4.2	61	10	NM	NM	181.2	0.21	47.29	58.6	132
			38.35	0.13	3.5	<2	NM	32	40.5	12989	1.1	24	10	NM	NM	150.5	0.19	18.56	33.1	78
			61.23	0.14	5.7	<2	NM	19	50.9	11237	2.1	29	24	NM	NM	80.1	0.38	15.63	33.1	90
			55.95	0.11	2.5	<2	NM	19	36.0	8436	1.0	24	8	NM	NM	122.9	0.15	13.56	25.3	54
			51.31	0.13	7.2	<2	NM	24	32.4	37672	1.0	20	21	NM	NM	120.4	0.46	7.86	53.7	77
			60.55	0.08	3.1	<2	NM	16	23.2	13539	1.8	16	6	NM	NM	79.6	0.12	9.75	20.7	59
			41.77	0.15	4.3	<2	NM	26	29.1	27172	1.1	21	11	NM	NM	103.5	0.19	8.20	42.1	67
			40.47	0.15	4.0	<2	NM	38	46.7	15532	1.7	27	12	NM	NM	165.0	0.21	26.88	45.3	92
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			58.52	0.10	3.1	<2	NM	22	26.6	16218	1.7	18	6	NM	NM	98.6	0.18	16.10	22.2	69
			49.09	0.11	4.2	<2	NM	24	45.1	16438	2.0	30	15	NM	NM	112.8	0.34	20.02	23.7	89
			42.87	0.14	3.0	2	NM	27	47.8	15237	1.3	24	12	NM	NM	200.1	0.16	77.60	34.0	61
			23.19	0.08	3.1	<2	NM	41	38.3	22487	1.5	30	8	NM	NM	126.2	0.09	23.30	37.8	76
			44.64	0.11	3.5	<2	NM	30	36.8	13769	1.6	27	20	NM	NM	115.5	0.32	34.91	28.6	80
			36.56	0.22	2.1	<2	NM	27	45.0	13271	1.4	30	9	NM	NM	112.3	0.12	34.13	38.1	57
			65.67	0.08	2.6	<2	NM	19	38.3	8087	1.4	29	7	NM	NM	91.0	0.13	31.76	12.2	53
			43.58	0.12	5.6	<2	NM	30	33.0	15102	1.3	24	25	NM	NM	109.5	0.55	25.51	30.5	69
			51.21	0.11	3.8	<2	NM	23	32.5	17642	1.5	23	14	NM	NM	98.6	0.24	23.20	29.5	60
			55.2	0.08	2.5	<2	NM	19	21.7	14210	1.7	18	6	NM	NM	75.4	0.14	14.17	25.1	84
			53.22	0.12	7.3	<2	NM	21	26.0	13690	1.6	22	37	NM	NM	62.2	1.04	54.63	21.2	87
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			33.42	0.06	2.2	<2	NM	31	20.5	15054	1.0	21	8	NM	NM	86.4	0.18	15.26	29.2	68
			45.79	0.12	3.3	<2	NM	22	25.5	8464	1.2	20	9	NM	NM	84.0	0.21	9.22	25.1	50
			53.51	0.07	1.8	<2	NM	16	21.1	6847	1.2	15	6	NM	NM	75.4	0.14	11.69	20.8	52
			41.36	0.09	3.0	<2	NM	26	23.0	15341	1.2	22	9	NM	NM	91.8	0.20	13.24	29.2	56
			45.54	0.09	2.1	<2	NM	25	22.9	11991	1.2	19	7	NM	NM	88.5	0.15	14.08	28.1	56
			28.16	0.11	6.4	<2	NM	37	26.3	76131	3.3	27	18	NM	NM	131.0	0.29	24.63	57.8	118
			51.03	0.11	4.2	<2	NM	22	22.7	11807	1.2	19	13	NM	NM	84.1	0.28	8.08	22.6	68
			52.25	0.09	3.0	<2	NM	18	18.8	14671	1.2	19	8	NM	NM	68.6	0.17	11.78	24.8	56
			39.65	0.10	2.8	<2	NM	28	23.4	9671	1.1	23	11	NM	NM	73.0	0.21	13.57	18.8	63
			68.67	0.07	2.1	<2	NM	12	14.1	3170	0.8	13	7	NM	NM	34.7	0.12	2.97	11.2	79
			53.42	0.13	2.3	<2	NM	15	24.9	11558	1.3	14	7	NM	NM	78.9	0.12	5.95	37.7	59
			50.36	0.07	2.5	<2	NM	21	23.8	17254	2.0	22	4	NM	NM	104.3	0.11	17.82	18.2	72
			43.16	0.07	2.7	<2	NM	12	14.2	6152	0.7	14	8	NM	NM	55.9	0.14	6.76	13.0	45
			44.02	0.07	2.7	<2	NM	12	15.3	5365	0.6	13	8	NM	NM	54.8	0.13	7.76	12.9	43
			36.2	0.08	2.6	<2	NM	28	19.4	15252	0.9	20	8	NM	NM	92.3	0.14	8.04	36.0	77
			47.27	0.10	3.8	<2	NM	17	36.3	12206	1.9	19	6	NM	NM	61.0	0.21	20.36	25.4	61
			59.79	0.09	2.0	<2	NM	16	19.9	13580	1.3	15	5	NM	NM	87.1	0.09	8.35	20.9	56
			56.1	0.11	3.3	<2	NM	27	25.9	11885	1.2	19	9	NM	NM	96.0	0.21	11.50	29.4	64
			45.29	0.12	2.8	<2	NM	26	26.1	13422	1.5	18	8	NM	NM	102.4	0.18	13.28	30.6	57
			58.68	0.09	2.7	<2	NM	17	21.5	9265	1.9	20	7	NM	NM	86.2	0.18	8.69	15.1	69

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	(Nad83)		Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	(Utm)		%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	(Datum)		0.01	0.02	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
[illegible]	[illegible]	[illegible]	46.2	0.19	1.8	<2	NM	18	29.9	23850	2.1	15	5	NM	NM	112.8	0.11	6.92	33.0	50
[illegible]	[illegible]	[illegible]	50.19	0.27	2.6	<2	NM	27	38.2	28262	2.5	19	9	NM	NM	136.1	0.13	23.34	67.6	73
[illegible]	[illegible]	[illegible]	57.92	0.23	4.0	<2	NM	39	25.5	20314	2.0	20	15	NM	NM	122.0	0.25	34.26	37.1	73
[illegible]	[illegible]	[illegible]	49.45	0.25	3.7	<2	NM	44	42.4	27437	1.5	35	9	NM	NM	70.7	0.16	1.44	45.9	105
[illegible]	[illegible]	[illegible]	41.24	0.17	2.6	<2	NM	51	47.8	33571	1.8	44	10	NM	NM	80.3	0.15	1.66	62.8	147
[illegible]	[illegible]	[illegible]	59.25	0.17	4.3	<2	NM	19	89.2	8764	6.4	23	4	NM	NM	57.1	0.18	2.03	22.0	59
[illegible]	[illegible]	[illegible]	52.85	0.37	3.3	<2	3.9	15	136.3	13153	2.8	24	5	0.8	0.4	83.4	0.15	1.68	28.2	63
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	52.67	0.19	2.6	<2	3.3	25	64.9	11842	1.7	25	8	1.3	0.6	52.8	0.12	1.57	35.9	63
[illegible]	[illegible]	[illegible]	53.46	0.15	3.7	<2	3.3	22	74.2	12712	1.4	26	5	0.8	0.3	55.5	0.16	1.50	24.8	74
[illegible]	[illegible]	[illegible]	39.9	0.19	3.1	<2	4.4	37	65.7	17497	1.2	35	6	1.2	0.5	79.4	0.10	1.90	33.5	93
[illegible]	[illegible]	[illegible]	21.25	0.15	2.2	<2	NM	54	51.1	28126	0.7	46	9	NM	NM	98.9	0.10	1.81	48.6	113
[illegible]	[illegible]	[illegible]	34.21	0.15	3.8	<2	10.3	24	104.5	13182	1.7	34	5	1.3	0.5	69.8	0.16	1.79	24.4	69
[illegible]	[illegible]	[illegible]	24.52	0.17	3.2	<2	2.1	55	58.8	28281	0.9	46	10	6.1	0.8	103.5	0.14	1.79	55.6	112
[illegible]	[illegible]	[illegible]	42.32	0.11	2.1	<2	NM	19	40.7	7458	0.9	23	3	NM	NM	49.8	0.09	1.28	16.1	59
[illegible]	[illegible]	[illegible]	36.71	0.18	1.7	<2	NM	31	44.4	15471	0.8	28	6	NM	NM	68.1	0.10	1.42	32.2	75
[illegible]	[illegible]	[illegible]	48.34	0.20	2.2	<2	NM	24	55.8	10060	1.0	24	5	NM	NM	70.0	0.10	1.74	24.4	73
[illegible]	[illegible]	[illegible]	40.2	0.12	2.7	<2	1.0	28	56.7	12109	1.0	32	5	0.3	0.1	63.7	0.11	1.91	20.6	63
[illegible]	[illegible]	[illegible]	36.91	0.18	2.9	<2	2.3	40	57.9	19032	1.1	34	9	1.1	1.3	83.9	0.14	1.81	46.2	92
[illegible]	[illegible]	[illegible]	34.45	0.18	3.4	<2	NM	25	92.1	9370	1.9	36	4	NM	NM	82.1	0.18	2.66	25.4	71
[illegible]	[illegible]	[illegible]	35.37	0.20	3.6	<2	NM	26	94.4	15740	1.9	37	5	NM	NM	76.8	0.20	2.42	28.4	70
[illegible]	[illegible]	[illegible]	23.52	0.11	2.7	<2	NM	46	44.8	22322	0.7	44	6	NM	NM	85.7	0.09	1.86	38.4	111
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	37.13	0.11	2.6	<2	NM	14	38.9	8358	1.2	18	4	NM	NM	39.0	0.10	0.85	22.0	62
[illegible]	[illegible]	[illegible]	46.74	0.23	3.2	<2	NM	20	45.5	6635	0.6	18	8	NM	NM	41.5	0.14	3.32	12.1	25
[illegible]	[illegible]	[illegible]	29.78	0.16	3.5	<2	NM	37	41.1	19835	1.4	40	7	NM	NM	84.1	0.10	1.94	41.2	151
[illegible]	[illegible]	[illegible]	58.08	0.09	1.8	<2	NM	10	35.8	4322	1.1	14	2	NM	NM	29.4	0.06	1.19	8.9	51
[illegible]	[illegible]	[illegible]	55.64	0.23	4.4	<2	2.0	36	58.0	18228	1.9	28	10	1.0	0.8	89.3	0.20	2.29	58.5	117
[illegible]	[illegible]	[illegible]	57.91	0.12	3.9	<2	NM	21	49.4	7757	1.3	30	5	NM	NM	65.3	0.15	1.82	21.0	49
[illegible]	[illegible]	[illegible]	49.8	0.19	2.9	<2	2.5	34	59.4	15297	0.8	35	5	1.1	1.1	83.6	0.13	2.01	32.5	97
[illegible]	[illegible]	[illegible]	60.27	0.19	4.2	<2	2.3	33	60.5	16133	0.8	34	6	0.8	0.6	86.2	0.15	1.70	40.0	105
[illegible]	[illegible]	[illegible]	24.73	0.12	2.8	<2	NM	47	36.7	26004	0.6	41	7	NM	NM	82.0	0.10	2.30	45.8	108
[illegible]	[illegible]	[illegible]	0.8	0.09	2.8	<2	NM	27	19.6	17340	0.7	24	5	NM	NM	54.4	0.07	1.66	32.2	62
[illegible]	[illegible]	[illegible]	38.72	0.07	1.9	8	NM	10	21.4	4100	0.8	12	3	NM	NM	25.4	0.08	1.34	8.7	35
[illegible]	[illegible]	[illegible]	39.52	0.12	2.2	<2	NM	31	41.0	15562	0.8	35	6	NM	NM	72.3	0.08	2.43	30.0	97
[illegible]	[illegible]	[illegible]	60.65	0.19	2.3	<2	3.4	14	62.1	14797	2.0	17	5	0.6	0.4	61.3	0.13	1.53	33.8	85
[illegible]	[illegible]	[illegible]	44.40	0.25	1.7	<2	3.2	26	6+0.42	15775	1.5	22	7	0.9	0.5	68.7	0.15	2.18	46.0	74
[illegible]	[illegible]	[illegible]	34.94	0.24	5.9	<2	2.6	40	56.3	32009	2.7	34	12	1.0	0.7	105.4	0.19	3.45	63.4	104
[illegible]	[illegible]	[illegible]	24.58	0.13	2.5	<2	NM	34	43.6	18775	0.8	35	7	NM	NM	88.7	0.09	2.70	30.2	94
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	29.53	0.16	3.6	<2	3.1	51	50.6	27236	1.1	51	9	1.1	0.5	102.5	0.12	4.28	55.9	123
[illegible]	[illegible]	[illegible]	46.56	0.13	3.4	<2	NM	29	50.0	14044	1.2	28	6	NM	NM	66.2	0.15	3.91	36.0	75
[illegible]	[illegible]	[illegible]	12.62	0.08	2.4	<2	NM	38	29.7	22578	0.8	34	6	NM	NM	70.8	0.08	2.49	38.3	88
[illegible]	[illegible]	[illegible]	27.85	0.15	4.7	<2	2.0	48	58.0	26021	2.1	43	8	0.8	0.4	107.0	0.15	3.94	55.2	122
[illegible]	[illegible]	[illegible]	29.34	0.19	7.2	<2	NM	46	54.1	57818	3.0	46	12	NM	NM	124.5	0.18	4.57	71.0	140
[illegible]	[illegible]	[illegible]	27.85	0.15	7.9	<2	NM	37	52.5	29080	3.5	38	10	NM	NM	108.7	0.18	7.56	49.9	126

			LOI	Ag	As	As	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			Gravi	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
			%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
			11.40	0.20	4.0	<2	NM	40	48.7	41423	1.8	38	12	NM	NM	86.3	0.18	3.96	57.0	83
			16.82	0.12	2.1	<2	NM	20	37.8	14232	1.2	24	5	NM	NM	50.3	0.10	1.80	24.5	62
			12.95	0.13	3.6	<2	NM	10	34.4	16186	2.3	13	4	NM	NM	29.8	0.08	0.91	21.8	74
			11.62	0.12	2.6	<2	NM	12	37.6	11807	1.6	17	4	NM	NM	36.2	0.10	0.89	30.1	71
			40	0.14	2.3	<2	NM	22	44.1	9140	1.2	23	4	NM	NM	51.4	0.10	1.25	28.5	68
			10.83	0.15	2.5	<2	NM	17	52.3	14476	3.8	21	4	NM	NM	57.4	0.14	1.21	43.7	73
			46.30	0.22	4.6	<2	NM	31	48.6	19667	2.2	26	13	NM	NM	87.2	0.26	1.84	61.3	89
			44.71	0.16	3.4	<2	NM	23	47.2	10389	1.8	27	5	NM	NM	70.5	0.08	1.97	26.0	78
			42.84	0.13	3.0	<2	NM	17	45.4	11027	1.6	24	4	NM	NM	47.7	0.11	1.64	22.6	61
			52.32	0.11	2.9	<2	NM	19	45.7	12160	1.2	22	4	NM	NM	53.2	0.09	1.60	25.6	69
			48.17	0.12	2.9	<2	NM	17	42.1	9139	0.9	20	4	NM	NM	54.2	0.09	1.29	26.2	59
			21.51	0.15	3.7	<2	NM	63	44.3	33554	0.4	54	12	NM	NM	96.9	0.09	1.84	55.2	137
			20.37	0.14	1.8	<2	1.5	64	41.9	34549	0.4	51	12	1.0	0.6	96.3	0.09	1.66	60.4	127
			43.08	0.14	3.8	<2	NM	38	43.5	22355	0.9	35	8	NM	NM	68.7	0.13	1.19	43.2	108
			58.08	0.16	5.8	<2	NM	29	29.1	16764	0.8	26	18	NM	NM	48.7	0.42	1.01	30.3	86
			39.47	N/A	4.7	<2	NM	37	N/A	21131	N/A	31	N/A	NM	NM	N/A	N/A	N/A	36.4	82
			34.64	0.15	5.0	<2	NM	49	38.7	26957	1.0	47	10	NM	NM	87.5	0.15	1.65	54.1	107
			38.12	0.20	3.3	<2	NM	43	42.7	25477	1.2	39	10	NM	NM	80.2	0.13	1.45	56.3	107
			24.34	0.13	3.4	<2	NM	52	42.2	29700	0.8	46	11	NM	NM	88.8	0.13	1.81	55.3	104
			17.18	0.22	3.6	<2	2.1	42	53.8	24941	1.3	38	9	0.7	0.3	96.4	0.15	1.79	58.6	103
			21.5	0.13	3.5	<2	NM	54	43.1	31733	0.8	46	12	NM	NM	93.9	0.12	1.71	60.2	105
			23.17	0.11	3.1	<2	NM	55	39.0	32720	0.8	47	11	NM	NM	92.2	0.09	1.86	55.1	109
			27.80	0.16	4.7	<2	NM	51	44.1	27586	0.6	46	10	NM	NM	92.7	0.09	1.94	48.9	108
			27.8	0.14	4.0	<2	NM	54	41.9	30587	0.7	47	10	NM	NM	94.5	0.07	1.75	50.6	106
			23.46	0.10	2.8	<2	1.3	59	43.2	34124	1.1	53	11	0.8	0.8	99.3	0.09	1.80	56.5	126
			47.17	0.13	3.1	<2	NM	19	35.2	9535	1.1	19	6	NM	NM	44.3	0.14	1.22	33.9	61
			38.45	0.14	4.0	<2	NM	23	49.5	12027	2.4	28	6	NM	NM	71.9	0.20	2.00	31.2	69
			42.74	0.13	4.5	<2	NM	19	49.7	10014	2.3	24	5	NM	NM	60.5	0.18	1.97	22.0	58
			41.62	0.12	3.6	<2	NM	29	39.0	16293	1.9	26	6	NM	NM	68.3	0.11	1.44	39.6	94
			33.38	0.14	4.3	<2	NM	42	42.1	24047	0.9	41	9	NM	NM	70.8	0.10	1.78	39.9	89
			37.45	0.13	4.4	<2	NM	19	36.4	14424	1.7	22	6	NM	NM	54.1	0.14	1.74	23.4	67
			44.02	0.14	2.9	<2	NM	15	4<0.48	16049	1.4	23	4	NM	NM	39.6	0.14	1.45	35.2	78
			53.31	0.10	2.0	<2	NM	6	38.2	7711	1.2	16	2	NM	NM	17.5	0.07	0.69	13.6	63
			44.54	0.10	4.3	<2	NM	18	58.7	10956	4.6	26	11	NM	NM	61.6	0.24	3.66	25.4	83
			42.77	0.09	3.3	<2	NM	33	35.9	15396	0.9	33	5	NM	NM	52.6	0.11	1.46	39.0	89
			45.28	0.11	3.1	<2	NM	30	37.1	15631	0.9	30	7	NM	NM	52.7	0.12	1.26	49.0	86
			33.18	0.11	3.1	<2	NM	34	42.7	20310	1.1	34	8	NM	NM	60.7	0.12	1.68	42.6	76
			40.40	0.11	3.9	<2	NM	27	39.0	13211	1.7	33	5	NM	NM	59.3	0.11	1.85	32.7	103
			52.66	0.10	3.3	<2	NM	22	39.1	11930	1.3	25	5	NM	NM	53.8	0.08	1.61	27.8	72
			25.73	0.09	5.1	<2	NM	37	35.5	19459	0.8	35	8	NM	NM	68.0	0.10	3.35	39.9	96
			14.69	0.13	4.9	<2	NM	36	41.4	24910	0.9	35	8	NM	NM	77.9	0.09	2.98	42.2	76
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			21.08	0.12	2.8	<2	NM	39	36.4	22373	0.7	37	7	NM	NM	76.8	0.10	2.76	35.5	95
			29.31	0.14	3.7	<2	NM	35	32.3	23752	0.7	33	9	NM	NM	86.4	0.15	3.00	42.4	112
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	——→	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	——→	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	——→	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
666	466614	5485867	36.62	0.17	6.1	<2	NM	39	45.9	29951	1.5	34	16	NM	NM	86.3	0.29	4.41	63.6	87
667	467632	5485253	36.43	0.16	4.7	<2	NM	35	42.2	28108	1.3	33	11	NM	NM	81.3	0.19	4.01	56.0	85
668	466440	5484652	33.34	0.15	4.4	<2	NM	40	37.0	22332	0.7	35	10	NM	NM	79.4	0.15	3.44	50.4	81
669	466622	5483702	18.72	0.12	6.1	<2	NM	48	46.1	36473	1.5	45	10	NM	NM	111.2	0.14	4.68	64.5	123
671	466527	5483332	39.66	0.24	5.3	<2	NM	32	41.6	18110	1.1	28	10	NM	NM	96.5	0.25	3.91	53.2	90
672	467583	5486595	37.55	0.18	5.5	<2	NM	31	29.8	39533	3.1	25	9	NM	NM	63.1	0.12	1.83	95.2	86
673	466795	5486515	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
674	464626	5485376	68.69	0.20	4.9	<2	NM	15	37.2	15426	1.7	16	5	NM	NM	50.7	0.13	2.09	41.0	95
675	463990	5484279	17.46	0.11	12.0	<2	NM	38	35.6	66550	2.0	39	19	NM	NM	91.0	0.18	3.66	70.3	116
676	465224	5488687	55.84	0.11	2.7	<2	1.3	12	78.2	7671	1.6	26	3	0.7	0.3	26.2	0.10	0.84	19.8	56
677	464785	5488313	51.86	0.07	2.5	<2	0.5	7	67.2	2814	1.7	19	4	0.5	0.3	19.7	0.11	0.62	5.8	32
678	466378	5489450	78.75	N/A	2.2	<2	NM	9	N/A	6539	N/A	12	N/A	NM	NM	N/A	N/A	N/A	10.5	43
679	465231	5490060	55.40	0.09	2.6	<2	NM	15	54.4	15704	1.0	17	4	NM	NM	30.1	0.09	0.79	34.8	52
681	466963	5490488	52.81	0.16	3.5	<2	NM	34	95.3	24691	1.2	30	6	NM	NM	80.9	0.10	2.89	63.5	77
682	468140	5489431	23.55	0.09	3.5	<2	NM	42	34.5	27305	1.0	37	5	NM	NM	64.6	0.07	1.87	51.4	99
683	468363	5488208	60.57	0.14	2.4	<2	NM	14	47.8	9563	7.3	17	4	NM	NM	62.0	0.11	2.10	32.8	49
684	469329	5488467	63.7	0.15	2.5	<2	0.5	8	58.9	9239	3.8	14	3	0.2	0.1	26.0	0.11	0.83	22.7	80
685	470797	5489067	35.57	0.07	2.1	<2	NM	25	24.8	14593	0.8	23	5	NM	NM	45.8	0.07	1.09	34.6	77
686	470826	5488629	58.29	0.14	3.0	<2	NM	21	45.0	11939	1.9	19	6	NM	NM	55.9	0.14	1.55	45.9	67
687	470775	5490103	33.66	0.12	3.3	<2	NM	32	49.2	19035	1.2	31	7	NM	NM	67.1	0.10	1.81	44.9	86
688	469418	5490157	32.54	0.13	4.3	<2	NM	33	48.3	19739	1.4	30	12	NM	NM	64.7	0.17	1.75	55.4	84
689	471485	5494532	63.11	0.09	2.0	<2	NM	12	59.0	13431	1.7	22	4	NM	NM	25.9	0.09	0.79	76.2	86
691	472469	5496621	55	0.09	3.0	<2	NM	23	42.6	13766	1.3	41	4	NM	NM	47.0	0.12	1.87	27.0	63
692	468240	5521960	27.73	0.12	2.7	<2	NM	42	42.4	20070	1.1	34	9	NM	NM	108.6	0.10	22.14	14.0	79
693	468866	5522491	21.97	0.10	4.4	<2	NM	43	42.7	22110	1.4	36	8	NM	NM	101.0	0.09	23.70	44.1	88
694	467173	5523868	55.26	0.15	4.7	<2	2.1	35	62.4	13086	1.0	31	5	1.5	0.4	71.2	0.13	6.80	33.2	72
695	466746	5524613	49.28	0.23	7.8	<2	2.0	34	76.0	30871	1.6	44	10	2.9	1.0	100.7	0.15	15.49	55.3	115
696	466870	5530601	39.7	0.13	3.1	<2	NM	34	33.5	15971	1.2	24	8	NM	NM	130.6	0.14	6.28	38.1	59
697	467332	5521285	45.76	0.17	5.0	<2	NM	34	41.3	20176	1.8	24	16	NM	NM	137.6	0.33	7.00	45.2	63
698	467641	5522184	43.68	0.11	2.4	<2	NM	39	33.8	12961	1.3	26	5	NM	NM	121.9	0.13	4.97	23.7	72
699	466810	5531848	42.13	0.07	1.3	<2	NM	12	16.2	3484	0.6	11	3	NM	NM	41.2	0.07	3.00	9.8	25
701	466073	5532499	42.22	0.12	3.5	<2	NM	37	33.4	14172	1.1	26	10	NM	NM	92.7	0.22	4.09	34.2	69
702	466058	5532609	39.4	0.10	1.6	<2	NM	31	21.9	15330	0.7	22	6	NM	NM	89.0	0.09	2.75	38.9	68
703	466277	5531600	55.75	N/A	1.2	<2	NM	10	N/A	5596	N/A	12	N/A	NM	NM	N/A	N/A	N/A	14.6	48
704	466902	5530535	38.2	0.08	2.3	<2	NM	26	21.0	9480	0.7	17	4	NM	NM	77.7	0.08	2.63	27.4	55
705	466437	5530766	49.39	0.09	2.4	<2	NM	28	28.4	11107	0.9	24	6	NM	NM	93.9	0.10	3.07	29.0	56
706	467828	5529739	66.92	0.10	3.0	<2	NM	22	28.4	14198	1.2	18	6	NM	NM	63.4	0.17	2.09	23.0	62
707	466997	5529528	45.31	0.22	3.5	<2	NM	30	37.0	20573	1.5	21	11	NM	NM	103.1	0.13	4.04	57.6	66
708	466870	5530111	41.26	0.08	2.7	<2	NM	24	22.4	11894	0.9	20	6	NM	NM	69.9	0.12	3.03	26.9	56
709	467917	5530844	40.9	0.15	3.7	<2	NM	32	36.3	18124	1.1	21	7	NM	NM	111.0	0.11	4.00	37.2	66
711	466243	5530889	57.27	0.09	2.8	<2	NM	16	20.8	12228	1.0	13	5	NM	NM	51.7	0.12	2.35	28.7	56
712	465130	5531458	28.47	0.09	3.3	<2	NM	36	26.3	40258	2.0	27	7	NM	NM	109.8	0.09	4.60	55.9	116
713	465382	5532422	40.2	0.10	2.3	<2	NM	37	31.8	11667	0.9	22	6	NM	NM	104.8	0.12	4.65	32.1	69
714	464230	5532902	22.24	0.09	2.0	<2	NM	39	26.0	19057	1.2	28	7	NM	NM	87.3	0.10	4.50	35.2	85
715	467407	5531830	47.45	0.09	2.5	<2	NM	13	23.8	3118	0.9	15	3	NM	NM	47.2	0.10	2.49	14.0	30
716	467466	5532223	37.16	0.10	2.1	<2	NM	36	25.7	24866	1.3	23	4	NM	NM	106.2	0.09	4.64	38.3	88

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	———	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	———	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	———	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
707	[illegible]	[illegible]	46.09	0.11	2.5	<2	NM	26	28.3	12519	1.6	18	6	NM	NM	78.2	0.17	2.91	41.9	62
708	[illegible]	[illegible]	47.01	0.09	3.0	<2	NM	16	18.1	7265	0.8	17	6	NM	NM	105.2	0.08	3.60	16.5	52
709	[illegible]	[illegible]	52.87	0.10	2.8	<2	NM	23	25.2	13883	1.7	19	4	NM	NM	92.0	0.13	4.39	27.9	71
721	[illegible]	[illegible]	58.31	0.15	2.2	<2	NM	9	28.0	7575	1.7	9	4	NM	NM	44.5	0.07	3.07	24.9	57
722	[illegible]	[illegible]	52.98	0.17	3.5	2	NM	26	26.8	19698	2.3	15	8	NM	NM	104.1	0.14	5.98	45.1	90
723	[illegible]	[illegible]	56.37	0.14	1.7	<2	NM	12	37.1	7815	1.4	12	3	NM	NM	63.7	0.09	2.60	34.2	55
724	[illegible]	[illegible]	42.02	0.10	2.8	<2	NM	21	34.4	12668	1.4	21	4	NM	NM	89.3	0.12	4.75	23.8	64
725	[illegible]	[illegible]	58.64	0.10	1.9	<2	NM	21	36.2	9636	1.4	25	4	NM	NM	94.3	0.14	6.26	21.7	70
726	[illegible]	[illegible]	46.32	0.11	4.7	<2	NM	21	22.1	12245	1.1	16	6	NM	NM	96.3	0.12	6.80	32.7	72
727	[illegible]	[illegible]	12.07	<0.04	1.3	<2	NM	13	11.3	11430	0.6	9	3	NM	NM	47.8	0.04	2.90	15.7	35
728	[illegible]	[illegible]	36.17	0.14	3.8	<2	NM	29	31.1	15523	0.9	21	8	NM	NM	92.7	0.13	5.61	33.6	71
729	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
731	[illegible]	[illegible]	42.34	0.12	3.7	<2	NM	26	41.9	13442	1.4	25	10	NM	NM	129.4	0.14	8.26	31.7	68
732	[illegible]	[illegible]	33.79	0.14	3.0	<2	NM	29	46.4	12605	1.5	22	8	NM	NM	117.8	0.12	10.03	39.0	57
733	[illegible]	[illegible]	52.97	0.10	2.7	<2	NM	20	27.5	13015	1.4	18	7	NM	NM	77.6	0.13	5.32	27.6	55
734	[illegible]	[illegible]	21.40	0.12	3.9	<2	1.9	60	63.4	26668	1.7	55	9	2.1	0.8	93.1	0.14	8.23	44.2	129
735	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
736	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
737	[illegible]	[illegible]	50.73	0.06	2.8	<2	1.0	25	48.9	8994	1.1	49	7	1.2	0.4	115.6	0.13	12.10	16.2	63
738	[illegible]	[illegible]	54.82	N/A	3.2	<2	NM	21	N/A	14256	N/A	24	N/A	NM	NM	N/A	N/A	N/A	23.6	63
739	[illegible]	[illegible]	65.74	0.07	2.1	<2	NM	15	19.8	12580	1.5	15	4	NM	NM	77.0	0.12	12.83	19.9	81
741	[illegible]	[illegible]	62.63	0.09	2.7	<2	NM	16	23.8	12542	1.3	13	5	NM	NM	104.8	0.14	21.44	17.7	64
742	[illegible]	[illegible]	42.52	0.15	2.3	<2	NM	25	29.6	19628	1.0	17	7	NM	NM	126.4	0.09	7.11	53.5	60
743	[illegible]	[illegible]	39.71	0.12	1.9	<2	1.4	48	77.4	9264	0.9	42	5	2.8	1.0	95.8	0.08	7.08	17.6	73
744	[illegible]	[illegible]	29.79	0.12	2.6	<2	0.5	50	55.2	12245	0.6	37	7	1.8	0.5	69.8	0.10	6.13	21.7	64
745	[illegible]	[illegible]	60.95	0.09	2.5	<2	NM	23	27.6	10222	1.2	21	5	NM	NM	65.2	0.08	3.87	27.3	65
746	[illegible]	[illegible]	61.17	0.08	2.5	<2	0.5	25	28.0	12028	1.2	52	5	0.3	0.1	63.4	0.11	3.03	19.5	67
747	[illegible]	[illegible]	58.33	0.12	2.1	<2	NM	23	34.1	10026	1.3	22	5	NM	NM	78.4	0.10	11.90	25.7	53
748	[illegible]	[illegible]	51.58	0.11	2.4	<2	NM	26	29.6	11854	1.3	22	8	NM	NM	76.8	0.11	9.55	34.1	59
749	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
751	[illegible]	[illegible]	45.66	0.16	2.8	<2	NM	44	51.4	11383	1.3	34	12	NM	NM	95.2	0.13	19.87	38.8	98
752	[illegible]	[illegible]	52.66	0.16	2.8	<2	2.7	27	84.8	18050	1.5	31	5	3.0	1.2	72.2	0.14	22.42	22.7	77
753	[illegible]	[illegible]	34.98	0.19	4.2	<2	1.8	60	91.4	59330	4.0	91	7	4.3	1.2	168.6	0.12	19.14	59.2	138
754	[illegible]	[illegible]	45.31	0.16	2.4	<2	1.4	46	120.8	12256	1.5	50	5	2.6	0.7	111.4	0.14	63.44	35.6	54
755	[illegible]	[illegible]	42.12	0.09	1.8	<2	NM	12	36.5	3317	2.1	33	3	NM	NM	61.7	0.09	6.31	14.2	38
756	[illegible]	[illegible]	64.64	0.07	2.0	<2	NM	17	17.6	8445	1.3	15	5	NM	NM	47.2	0.11	14.48	15.9	61
757	[illegible]	[illegible]	44.35	0.12	2.8	<2	NM	38	40.1	14610	1.4	29	10	NM	NM	96.2	0.13	29.33	46.3	81
758	[illegible]	[illegible]	45.43	0.09	2.4	<2	NM	30	26.5	11067	1.2	28	7	NM	NM	99.3	0.12	11.90	27.2	60
759	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
761	[illegible]	[illegible]	23.2	0.09	3.0	<2	NM	35	24.5	21729	1.8	27	8	NM	NM	92.3	0.12	17.20	37.5	95
762	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
763	[illegible]	[illegible]	36.52	0.08	2.0	<2	NM	33	21.4	12447	1.1	24	8	NM	NM	89.8	0.12	23.27	27.9	69
764	[illegible]	[illegible]	62.86	0.10	2.3	<2	NM	17	18.1	9506	1.0	15	6	NM	NM	65.5	0.10	9.61	31.6	53
765	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
766	[illegible]	[illegible]	53.11	0.27	2.5	<2	2.0	85	116.6	21336	2.5	150	12	1.0	0.4	75.3	0.13	14.34	49.4	135
767	[illegible]	[illegible]	49.36	0.12	2.8	<2	NM	46	38.6	11733	1.2	35	7	NM	NM	105.2	0.11	21.85	26.7	69

Sample	Easting	Northing	LOI	Ag	As	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method		Grav	MS	INAA	INAA	FA	OES	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units		%	ppm	ppm	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit		0.01	0.04	0.5	2	0.1	1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
[illegible]	[illegible]	[illegible]	14.21	0.12	2.1	<2	NM	47	33.1	29320	1.9	45	8	NM	NM	72.3	0.06	31.16	36.8	160
[illegible]	[illegible]	[illegible]	12.37	0.13	3.1	<2	1.5	42	31.6	16018	3.5	57	7	0.8	0.4	60.6	0.17	58.99	22.0	98
[illegible]	[illegible]	[illegible]	49.2	0.14	2.4	<2	NM	45	27.4	13573	3.3	34	17	NM	NM	65.6	0.10	50.23	38.5	58
[illegible]	[illegible]	[illegible]	40.52	0.26	3.3	<2	9.8	50	50.8	12995	1.3	40	21	0.7	0.4	95.1	0.27	32.73	38.2	104
[illegible]	[illegible]	[illegible]	28.66	0.16	2.5	<2	NM	84	40.2	20521	1.2	45	10	NM	NM	98.6	0.10	34.96	35.1	118
[illegible]	[illegible]	[illegible]	56.94	0.35	2.0	5	5.3	19	54.1	8046	1.4	24	4	0.4	0.4	38.9	0.08	13.35	21.1	67
[illegible]	[illegible]	[illegible]	51.21	0.19	2.5	<2	3.1	41	57.9	13302	2.8	35	8	0.4	0.6	75.5	0.12	24.56	27.6	71
[illegible]	[illegible]	[illegible]	NM	NM	2.1	<2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
[illegible]	[illegible]	[illegible]	61.39	0.05	INF	INF	NM	45	38.8	11696	2.3	70	19	NM	NM	111.1	0.09	22.74	14.6	108
[illegible]	[illegible]	[illegible]	60.58	0.11	2.5	<2	NM	29	43.2	9918	2.2	41	6	NM	NM	99.8	0.12	16.23	23.0	93
[illegible]	[illegible]	[illegible]	46.3	0.13	2.9	<2	NM	24	28.1	14814	1.0	22	10	NM	NM	69.3	0.13	7.69	37.9	64
[illegible]	[illegible]	[illegible]	59.66	0.10	2.5	<2	NM	20	33.4	12096	2.8	18	4	NM	NM	57.4	0.14	10.51	24.4	69
[illegible]	[illegible]	[illegible]	42.44	0.18	3.0	<2	NM	29	35.2	19118	1.4	25	15	NM	NM	93.5	0.17	36.34	47.3	92
[illegible]	[illegible]	[illegible]	34.78	0.11	1.6	<2	NM	24	30.7	6337	0.7	18	7	NM	NM	51.4	0.08	19.13	16.4	124
[illegible]	[illegible]	[illegible]	71.84	0.09	2.1	<2	NM	18	18.0	13627	1.3	16	4	NM	NM	47.0	0.13	5.43	18.5	74
[illegible]	[illegible]	[illegible]	62.7	0.08	2.7	<2	NM	15	21.9	16027	1.2	16	8	NM	NM	48.6	0.14	2.85	35.5	65
[illegible]	[illegible]	[illegible]	50.43	0.05	1.9	<2	NM	13	15.8	3911	0.8	13	3	NM	NM	33.7	0.06	7.20	9.1	32
[illegible]	[illegible]	[illegible]	65.58	0.10	2.5	<2	NM	30	30.7	8924	1.4	27	5	NM	NM	119.8	0.16	17.59	21.7	61
[illegible]	[illegible]	[illegible]	52.77	0.07	2.2	<2	NM	17	16.9	8269	0.7	16	5	NM	NM	57.3	0.09	6.44	17.6	46
[illegible]	[illegible]	[illegible]	46.52	0.13	3.2	<2	NM	31	3<0.46	16827	1.4	22	9	NM	NM	94.1	0.25	9.01	44.8	66
[illegible]	[illegible]	[illegible]	46.52	0.14	2.5	<2	NM	29	34.3	18190	1.5	25	10	NM	NM	108.5	0.12	9.75	38.2	66
[illegible]	[illegible]	[illegible]	63.21	0.12	2.0	<2	NM	13	42.8	6216	2.9	17	4	NM	NM	37.5	0.10	10.38	21.7	83
[illegible]	[illegible]	[illegible]	40.74	0.12	1.8	<2	NM	39	27.4	10201	0.8	35	9	NM	NM	58.5	0.11	8.01	24.9	70
[illegible]	[illegible]	[illegible]	47.57	0.22	3.9	<2	NM	38	32.2	23950	1.5	38	16	NM	NM	64.1	0.24	8.47	60.6	60
[illegible]	[illegible]	[illegible]	22.04	0.11	2.8	<2	NM	46	26.2	22323	1.9	40	8	NM	NM	91.1	0.11	37.77	38.8	123
[illegible]	[illegible]	[illegible]	58.2	0.21	2.1	<2	NM	34	36.3	10269	2.3	23	14	NM	NM	49.6	0.11	9.99	41.1	98
[illegible]	[illegible]	[illegible]	51.21	0.13	2.4	<2	NM	58	35.4	11503	1.3	42	8	NM	NM	73.6	0.12	19.09	29.7	74
[illegible]	[illegible]	[illegible]	59.84	0.12	2.9	<2	NM	38	28.7	13688	1.1	32	12	NM	NM	50.2	0.21	19.09	33.2	55
[illegible]	[illegible]	[illegible]	53.19	0.13	1.7	<2	NM	51	36.2	10266	1.1	32	5	NM	NM	70.7	0.09	5.84	29.6	73
[illegible]	[illegible]	[illegible]	54.88	0.15	2.3	<2	NM	59	45.9	11193	1.6	47	7	NM	NM	87.0	0.11	31.48	25.2	88
[illegible]	[illegible]	[illegible]	42.29	0.12	2.1	<2	NM	27	22.6	11058	1.0	25	7	NM	NM	60.7	0.09	58.30	25.6	58
[illegible]	[illegible]	[illegible]	58.47	0.34	1.8	<2	NM	24	47.1	9350	2.5	31	6	NM	NM	48.3	0.11	5.58	25.1	93
[illegible]	[illegible]	[illegible]	54.28	0.24	3.6	<2	NM	35	44.4	11150	2.3	32	8	NM	NM	91.4	0.24	6.59	28.3	112
[illegible]	[illegible]	[illegible]	55.84	0.26	3.0	<2	NM	30	5<0.49	15546	1.7	40	6	NM	NM	96.5	0.13	4.19	29.7	104
[illegible]	[illegible]	[illegible]	44.46	0.13	2.6	<2	NM	46	41.1	10666	1.4	41	5	NM	NM	61.3	0.10	2.54	30.8	58
[illegible]	[illegible]	[illegible]	47.77	0.10	2.5	<2	NM	42	30.7	11104	1.1	45	6	NM	NM	73.6	0.10	4.94	28.1	67
[illegible]	[illegible]	[illegible]	56.5	0.08	1.7	<2	NM	15	21.7	4718	1.1	30	4	NM	NM	34.3	0.10	4.85	11.5	50
[illegible]	[illegible]	[illegible]	51.68	0.14	1.4	<2	NM	32	48.0	10220	1.1	36	5	NM	NM	61.1	0.08	2.68	27.8	84
[illegible]	[illegible]	[illegible]	59.59	0.18	1.3	<2	2.4	15	76.2	10149	1.9	24	4	0.9	1.0	45.6	0.12	2.73	29.0	81
[illegible]	[illegible]	[illegible]	50	0.13	1.8	<2	7.8	59	46.9	27317	1.3	121	4	1.1	0.6	68.8	0.10	3.87	27.8	126
[illegible]	[illegible]	[illegible]	47.79	0.15	2.6	<2	3.4	32	51.0	18962	1.1	66	13	0.6	0.3	76.2	0.25	4.34	29.2	84
[illegible]	[illegible]	[illegible]	40.11	0.23	3.0	<2	2.3	44	55.5	13893	1.1	41	12	0.7	0.3	90.8	0.19	5.08	28.9	80
[illegible]	[illegible]	[illegible]	43.53	0.17	4.0	<2	1.0	55	33.3	29243	1.6	50	11	0.7	0.2	90.6	0.18	6.53	44.0	89
[illegible]	[illegible]	[illegible]	50.7	0.15	0.9	<2	1.7	18	52.6	3796	0.9	20	3	0.7	0.1	35.4	0.06	2.05	11.3	54
[illegible]	[illegible]	[illegible]	53.89	0.69	2.0	8	NM	30	34.7	8947	0.9	26	18	NM	NM	54.9	0.12	7.00	21.0	655
[illegible]	[illegible]	[illegible]	47.3	0.17	2.1	<2	NM	30	29.3	12262	0.6	31	7	NM	NM	54.9	0.08	13.80	19.4	177

				Ag	As	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
				Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
				%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
				0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
				37.35	0.04	1.6	<2	NM	9	12.5	2338	1.9	9	3	NM	NM	24.6	0.09	2.69	7.9	15
				58.89	0.07	3.2	<2	NM	24	19.0	11931	1.1	27	5	NM	NM	40.9	0.11	1.96	23.6	116
				22.36	0.14	2.2	<2	NM	62	36.4	32264	0.6	50	11	NM	NM	100.5	0.11	3.10	58.0	109
				16.87	0.16	1.8	<2	NM	57	30.4	30007	0.6	44	10	NM	NM	94.4	0.09	4.33	51.0	106
				64.23	0.10	2.1	<2	NM	28	29.5	16095	1.6	26	7	NM	NM	79.7	0.10	21.85	28.9	68
				47.36	0.12	3.3	<2	NM	26	23.8	16869	1.4	23	6	NM	NM	78.6	0.13	5.84	27.1	86
				57.7	0.11	4.8	<2	NM	14	18.5	8456	1.4	14	12	NM	NM	41.5	0.27	2.99	17.8	78
				51.01	0.13	3.1	<2	0.5	19	25.1	2076	1.2	79	7	0.3	0.2	71.9	0.14	5.93	14.0	79
				18.37	0.14	3.2	<2	0.5	64	31.6	36961	0.5	51	12	0.4	0.3	107.3	0.10	3.50	63.8	116
				51.43	0.07	5.7	<2	NM	31	36.7	23428	3.0	30	7	NM	NM	54.9	0.17	9.45	36.3	72
				21.27	0.16	2.6	<2	NM	58	32.0	28800	0.9	42	11	NM	NM	108.9	0.10	9.51	54.8	152
				27.13	0.11	2.9	<2	NM	56	34.0	31191	2.0	48	11	NM	NM	113.2	0.09	4.93	54.3	99
				23.84	0.15	1.9	<2	NM	40	33.1	22070	0.7	41	9	NM	NM	98.3	0.07	12.18	37.2	156
				21.55	0.14	2.3	<2	NM	39	23.9	19090	0.5	32	8	NM	NM	73.7	0.06	10.14	29.0	143
				23.4	0.23	1.6	<2	NM	53	39.5	37160	3.1	42	12	NM	NM	123.6	0.13	17.47	70.3	177
				64.93	0.13	1.7	<2	NM	10	18.3	3250	1.9	16	4	NM	NM	46.5	0.07	9.93	11.7	42
				43.11	0.33	2.8	<2	2.9	28	67.3	15950	1.1	26	23	0.3	0.1	70.3	0.10	16.67	31.3	730
				53.37	0.23	4.0	<2	NM	28	121.1	12213	3.5	83	7	NM	NM	63.8	0.19	9.91	15.9	212
				32.41	0.41	2.9	<2	NM	35	9+0.46	14348	0.8	33	15	NM	NM	85.4	0.09	13.84	31.5	326
				24.52	0.16	3.7	<2	1.5	84	65.8	23087	1.3	60	9	1.6	0.5	109.3	0.14	32.75	38.8	88
				58.03	0.40	5.6	<2	4.1	110	133.1	29096	2.5	150	11	3.7	1.2	96.1	0.16	19.52	34.3	119
				24.02	0.11	2.6	<2	1.1	77	69.9	19711	1.1	56	9	1.2	0.5	108.3	0.10	17.18	29.8	82
844	449509	5524853		41.55	0.21	2.9	<2	1.0	31	51.1	10892	3.1	21	9	0.7	0.2	123.9	0.16	60.20	26.0	64
845	449143	5524605		61.67	0.12	2.1	<2	NM	22	38.8	16123	3.5	21	6	NM	NM	57.2	0.13	90.00	25.5	72
846	448311	5523516		25.88	0.17	4.3	<2	1.2	79	57.2	41878	2.9	64	10	1.5	0.5	125.7	0.12	24.78	54.0	119
847	447956	5524752		24.13	0.17	3.9	<2	NM	38	38.7	38501	4.7	31	12	NM	NM	236.5	0.11	57.49	49.8	108
848	448297	5524547		21.65	0.16	3.9	<2	NM	35	37.3	35400	4.6	30	11	NM	NM	254.5	0.10	59.68	46.3	105
849	449616	5523923		16.1	0.08	2.2	<2	NM	30	31.7	17517	1.6	29	4	NM	NM	100.2	0.05	17.36	23.3	63
851	449864	5523504		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
852	449360	5524588		42.02	0.08	1.4	<2	NM	15	18.1	9663	1.0	13	5	NM	NM	83.6	0.06	5.45	23.1	53
853	448509	5525645		59.15	0.18	2.0	<2	NM	8	45.1	11485	3.5	13	5	NM	NM	135.7	0.09	9.87	29.1	63
854	448567	5525473		48.32	0.16	1.5	<2	NM	13	31.8	6291	1.0	12	4	NM	NM	102.5	0.06	5.97	14.1	45
855	448380	5525685		57.92	0.14	1.8	<2	NM	10	35.6	9651	3.0	14	3	NM	NM	54.1	0.07	3.74	21.1	54
856	452229	5526551		29.12	0.13	4.4	<2	NM	33	46.9	27440	5.7	32	10	NM	NM	166.4	0.15	41.08	44.0	116
857	453309	5525844		53.15	0.17	1.3	<2	NM	8	35.7	6061	2.8	11	13	NM	NM	55.3	0.08	26.93	14.5	102
858	452479	5525180		55.81	0.13	3.3	<2	NM	17	53.6	11003	1.5	18	5	NM	NM	59.7	0.10	20.07	28.5	51
859	452869	5524571		14.9	0.11	6.0	<2	1.5	75	55.3	33456	2.8	71	16	2.0	1.0	130.7	0.14	35.05	66.4	114
861	453968	5522235		33.41	0.46	4.3	<2	3.2	41	63.4	20015	1.7	32	12	0.9	0.5	94.2	0.14	11.85	38.8	198
862	456897	5526010		42.44	0.14	2.6	<2	1.5	20	56.8	6097	1.2	35	6	4.1	0.9	48.2	0.12	17.43	15.3	51
863	456911	5524554		58.42	0.14	5.5	<2	7.0	23	95.3	9378	1.4	33	6	2.7	0.6	43.2	0.17	1.71	28.4	117
864	456961	5523237		64.11	0.07	7.4	<2	NM	16	32.7	7428	1.3	19	4	NM	NM	30.9	0.10	1.54	24.6	48
865	456380	5523553		62.54	0.07	3.6	<2	2.0	9	57.2	5027	1.0	19	3	1.0	0.2	29.8	0.10	1.03	13.7	43
866	456209	5523886		67.44	0.13	3.9	<2	NM	19	106.6	24678	1.3	40	3	NM	NM	44.6	0.17	1.33	52.2	110
867	456637	5524317		44.56	0.11	2.3	<2	NM	12	51.4	5807	0.8	22	4	NM	NM	29.0	0.10	2.30	13.7	64
868	458130	5524079		67.52	N/A	10.0	<2	NM	10	N/A	11683	N/A	21	N/A	NM	NM	N/A	N/A	N/A	26.1	62
869	459024	5523571		44.58	0.15	5.0	<2	NM	40	46.0	18279	0.9	31	6	NM	NM	72.6	0.11	5.30	43.4	89

Sample	Easting	Northing	LDI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
871	456783	5523129	53.83	0.10	4.5	<2	NM	17	27.7	7056	0.6	20	5	NM	NM	26.9	0.09	3.62	13.5	55
872	456385	5522975	21.2	0.17	5.3	<2	NM	34	43.5	28261	1.9	33	8	NM	NM	100.5	0.09	20.92	42.7	245
873	457518	5520853	32.25	0.14	2.9	<2	NM	32	30.1	18680	1.6	27	9	NM	NM	81.3	0.10	24.95	35.8	99
874	456781	5520916	27.93	0.12	2.7	<2	NM	26	25.1	15245	0.9	21	9	NM	NM	66.7	0.11	17.05	29.3	80
875	456733	5520425	51.12	0.15	3.2	<2	NM	27	28.0	14034	2.4	25	11	NM	NM	75.6	0.15	47.28	41.2	83
876	461817	5521625	49.54	0.12	3.1	<2	NM	28	30.0	16579	1.8	24	7	NM	NM	88.9	0.12	65.24	36.0	70
877	462726	5521230	40.4	0.15	3.4	<2	NM	40	35.7	16965	1.6	30	11	NM	NM	97.3	0.15	41.85	45.3	99
878	463945	5522534	64.55	0.08	3.8	<2	NM	23	43.0	13467	3.4	37	7	NM	NM	78.2	0.17	56.10	19.8	84
879	464972	5522359	65.59	0.08	2.7	<2	NM	17	23.4	6643	1.8	19	6	NM	NM	48.7	0.14	23.52	24.9	34
880	473234	5520699	56.79	0.10	2.0	<2	NM	18	24.8	5265	1.3	13	5	NM	NM	78.3	0.14	6.20	22.8	50
882	472142	5502104	68.26	0.07	2.7	<2	NM	11	19.2	7464	2.0	11	4	NM	NM	57.8	0.11	5.12	11.7	50
883	471388	5499458	59.53	0.16	3.4	<2	NM	17	27.0	14372	2.5	15	8	NM	NM	130.6	0.12	6.56	36.4	61
884	470886	5498914	44.48	0.11	2.9	<2	NM	21	21.8	10974	2.7	19	6	NM	NM	113.9	0.11	8.66	19.3	73
885	470242	5499542	60.89	0.09	2.7	<2	NM	14	19.5	11208	2.6	14	5	NM	NM	88.6	0.12	10.74	19.4	81
886	469691	5498682	24.42	0.08	1.3	<2	NM	18	14.6	12406	2.4	12	4	NM	NM	75.7	0.07	6.69	19.6	65
887	471012	5498314	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
888	470291	5497410	40.56	0.12	3.5	<2	NM	26	29.2	16966	1.4	27	7	NM	NM	89.3	0.11	3.63	27.7	81
889	469445	5497886	56.82	0.30	5.0	2	NM	33	38.2	60759	5.0	23	7	NM	NM	157.0	0.15	5.29	66.5	105
891	469140	5498191	59.42	0.08	3.2	<2	NM	15	20.9	13501	3.0	13	8	NM	NM	88.7	0.18	8.45	20.5	68
892	468573	5497675	54.51	0.10	3.1	<2	NM	16	22.7	7701	3.0	17	9	NM	NM	116.6	0.16	8.36	17.2	60
893	469199	5496803	50.34	0.11	3.4	<2	NM	21	32.1	10173	1.6	29	5	NM	NM	74.8	0.10	3.82	16.6	78
894	468791	5497162	28.73	0.09	2.5	<2	NM	31	2<0.41	20008	1.7	23	6	NM	NM	137.1	0.07	5.98	30.6	93
895	467999	5497079	49.4	0.12	3.8	<2	NM	21	25.6	18674	3.8	18	9	NM	NM	138.4	0.19	7.44	30.5	81
896	467767	5496960	44.9	0.17	3.4	<2	NM	26	27.6	18797	3.7	18	8	NM	NM	206.2	0.13	8.70	41.6	81
897	466388	5497194	42.77	0.13	2.6	<2	NM	20	3<0.42	9143	2.2	14	6	NM	NM	123.7	0.12	6.98	17.0	61
898	466147	5497481	50.75	0.11	2.3	<2	NM	13	37.5	5828	2.2	15	6	NM	NM	148.6	0.12	10.33	10.2	73
899	465574	5496273	47.28	0.08	2.4	<2	NM	12	23.7	7483	3.1	12	5	NM	NM	72.7	0.14	5.12	16.4	89
901	466098	5495402	56.28	0.09	2.3	<2	NM	12	18.0	6303	2.1	14	6	NM	NM	132.9	0.13	5.19	15.9	68
902	465355	5496511	56.64	0.09	3.0	<2	NM	14	22.0	7066	3.0	14	8	NM	NM	176.8	0.17	10.45	16.7	53
903	464623	5495921	46.79	0.10	2.4	<2	NM	21	20.6	11608	2.2	15	6	NM	NM	130.4	0.11	5.51	22.6	80
904	465326	5493867	57.18	0.12	2.5	4	NM	13	24.5	9532	2.4	12	5	NM	NM	79.6	0.14	2.53	19.2	70
905	467147	5493452	55.44	0.08	1.8	<2	NM	23	25.4	14164	0.7	22	5	NM	NM	38.2	0.08	1.23	34.5	62
906	467019	5493699	64.38	60.00	3.3	<2	1.4	20	48.6	9620	2.2	57	5	0.7	0.5	41.0	0.10	1.64	10.1	58
907	466355	5492937	44.51	0.15	3.1	<2	NM	40	46.7	23949	1.2	37	6	NM	NM	56.9	0.11	2.00	39.0	75
908	465286	5493234	61.43	0.05	2.3	<2	NM	8	21.3	4800	1.4	12	6	NM	NM	33.8	0.11	1.40	10.5	47
909	465444	5492719	49.36	0.13	2.1	<2	NM	25	49.7	8797	2.3	23	4	NM	NM	74.7	0.11	2.87	19.4	55
911	464751	5492058	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
912	464393	5491801	52.1	0.12	2.7	<2	NM	16	42.6	13969	2.0	18	6	NM	NM	40.3	0.14	1.80	28.9	57
913	466088	5491918	66.46	0.06	1.6	<2	NM	17	25.4	7633	0.8	19	3	NM	NM	24.3	0.07	0.85	13.6	54
914	465425	5491611	51.99	0.05	1.9	<2	NM	11	29.5	5223	1.0	19	4	NM	NM	22.9	0.08	0.80	10.0	51
915	467236	5491937	57.58	0.09	2.6	<2	NM	19	33.3	13098	1.3	20	5	NM	NM	42.9	0.15	1.38	35.4	50
916	469519	5491264	35.73	0.11	2.7	<2	NM	31	46.9	17390	1.3	27	6	NM	NM	62.0	0.10	1.85	39.8	73
917	468860	5491136	58.63	0.87	6.7	<2	1.8	19	59.9	20577	7.7	35	5	1.1	0.7	37.5	0.22	3.12	20.2	63
918	471835	5491363	56.56	0.09	5.2	<2	NM	25	44.1	15741	1.2	37	5	NM	NM	41.9	0.14	1.34	41.0	73
919	472199	5492642	67.17	0.08	3.6	<2	NM	18	35.5	14683	1.5	21	6	NM	NM	36.6	0.15	1.22	25.5	57
921	471793	5493373	58.45	0.09	3.8	<2	NM	18	28.0	13194	1.1	18	8	NM	NM	32.9	0.21	1.09	29.5	56

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	——→	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	——→	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Detection	——→	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
[illegible]	[illegible]	[illegible]	52.23	0.13	3.3	<2	NM	26	45.2	17364	1.3	32	5	NM	NM	51.8	0.14	1.87	38.9	81
[illegible]	[illegible]	[illegible]	49.62	0.08	2.6	<2	NM	18	35.4	8778	0.9	27	5	NM	NM	31.9	0.09	1.19	27.4	48
[illegible]	[illegible]	[illegible]	38.05	0.09	3.3	<2	NM	35	36.3	21597	1.0	36	6	NM	NM	60.7	0.13	1.73	48.1	82
[illegible]	[illegible]	[illegible]	42.77	0.10	4.2	<2	NM	34	37.4	18997	0.9	35	8	NM	NM	61.6	0.16	1.81	45.7	82
[illegible]	[illegible]	[illegible]	43.25	0.10	4.5	<2	NM	34	36.7	19213	0.8	36	10	NM	NM	61.9	0.18	1.64	44.8	83
[illegible]	[illegible]	[illegible]	39.81	0.09	3.1	7	NM	34	34.9	23597	0.7	34	9	NM	NM	63.7	0.16	1.38	43.7	72
[illegible]	[illegible]	[illegible]	53.12	0.10	2.2	<2	NM	22	52.0	13228	1.1	27	4	NM	NM	37.0	0.13	1.31	65.1	80
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	32.82	0.10	5.1	<2	NM	39	44.1	32089	1.9	34	8	NM	NM	70.0	0.11	2.33	67.0	131
[illegible]	[illegible]	[illegible]	38.09	0.14	2.7	<2	NM	36	51.3	13278	1.1	32	6	NM	NM	59.6	0.11	2.34	25.9	79
[illegible]	[illegible]	[illegible]	37.74	0.15	6.0	<2	NM	40	51.3	51856	3.3	40	8	NM	NM	74.6	0.16	2.68	53.1	124
[illegible]	[illegible]	[illegible]	62.80	0.07	2.1	<2	NM	15	26.2	8273	0.8	17	3	NM	NM	30.6	0.11	0.81	27.6	56
[illegible]	[illegible]	[illegible]	51.3	0.07	2.0	<2	NM	12	36.6	6559	1.1	16	4	NM	NM	37.4	0.16	1.39	24.2	52
[illegible]	[illegible]	[illegible]	58.3	<0.04	1.3	<2	NM	9	19.6	4805	0.7	18	3	NM	NM	15.8	0.06	0.51	7.8	37
[illegible]	[illegible]	[illegible]	39.21	0.12	2.4	<2	NM	28	19.8	18813	1.3	21	8	NM	NM	101.1	0.12	3.71	29.9	89
[illegible]	[illegible]	[illegible]	53.87	0.13	2.3	<2	4.3	25	69.7	14605	2.5	19	7	0.3	0.1	146.3	0.10	4.94	26.6	84
[illegible]	[illegible]	[illegible]	61.8	0.14	2.2	<2	NM	17	21.7	16212	2.5	16	7	NM	NM	55.1	0.12	28.22	25.3	63
[illegible]	[illegible]	[illegible]	40.73	0.22	14.0	<2	NM	25	36.5	37092	7.9	22	34	NM	NM	111.0	0.62	74.07	36.3	92
[illegible]	[illegible]	[illegible]	16.52	0.05	0.8	<2	NM	20	8.7	11063	0.5	12	6	NM	NM	42.0	0.05	11.24	22.4	51
[illegible]	[illegible]	[illegible]	12.37	0.10	3.5	<2	NM	49	35.5	25913	1.4	42	12	NM	NM	112.4	0.13	32.33	52.3	97
[illegible]	[illegible]	[illegible]	13.87	0.13	2.4	<2	1.5	70	32.3	36995	0.4	50	12	0.5	0.3	100.8	0.08	3.88	62.6	108
[illegible]	[illegible]	[illegible]	33.63	0.09	8.5	<2	NM	30	36.9	21828	1.4	27	8	NM	NM	99.0	0.12	8.02	35.8	58
[illegible]	[illegible]	[illegible]	55.75	0.13	6.8	<2	NM	28	42.6	17237	1.4	23	6	NM	NM	86.2	0.16	5.58	35.8	90
[illegible]	[illegible]	[illegible]	51.41	0.08	6.7	<2	NM	26	37.7	19379	2.0	25	5	NM	NM	87.5	0.16	6.22	40.4	80
[illegible]	[illegible]	[illegible]	48.69	0.08	3.4	<2	NM	19	21.3	10646	1.1	19	6	NM	NM	45.1	0.10	4.26	26.7	67
[illegible]	[illegible]	[illegible]	60.11	0.15	4.0	<2	NM	11	45.5	15478	1.7	17	4	NM	NM	35.1	0.11	2.36	31.5	86
[illegible]	[illegible]	[illegible]	24.9	0.08	9.1	<2	NM	32	30.6	23533	1.3	34	6	NM	NM	63.9	0.11	25.37	34.3	75
[illegible]	[illegible]	[illegible]	21.94	0.03	4.2	<2	NM	39	27.7	28858	0.8	31	7	NM	NM	82.8	0.07	22.47	40.4	85
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	40.34	0.04	4.2	<2	NM	20	20.4	10616	1.2	22	5	NM	NM	49.6	0.07	10.77	24.8	46
[illegible]	[illegible]	[illegible]	17.05	0.14	3.6	<2	1.5	66	53.7	36949	1.1	59	13	0.9	0.7	116.0	0.14	6.80	62.7	99
[illegible]	[illegible]	[illegible]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
[illegible]	[illegible]	[illegible]	36.61	0.13	1.8	<2	NM	27	29.2	17268	2.2	20	8	NM	NM	73.0	0.08	15.88	39.4	65
[illegible]	[illegible]	[illegible]	48.1	0.13	2.9	<2	NM	33	28.9	20227	1.4	26	10	NM	NM	86.7	0.17	5.60	42.6	82
[illegible]	[illegible]	[illegible]	38.42	0.09	1.6	<2	NM	27	22.0	13580	3.3	18	6	NM	NM	49.7	0.11	22.41	52.5	84
[illegible]	[illegible]	[illegible]	19.86	0.13	3.0	<2	1.2	70	37.0	35135	1.2	49	12	0.8	0.4	107.1	0.09	5.15	65.2	103
[illegible]	[illegible]	[illegible]	51.39	0.11	2.0	<2	NM	25	25.2	12078	1.2	23	5	NM	NM	52.3	0.08	1.63	24.5	76
[illegible]	[illegible]	[illegible]	13.8	0.15	2.5	<2	0.5	82	33.7	41052	0.6	55	12	0.4	1.3	114.7	0.09	3.41	69.4	141
[illegible]	[illegible]	[illegible]	20.31	0.12	1.9	<2	NM	66	27.7	32864	0.4	46	10	NM	NM	86.5	0.08	3.73	51.5	126
[illegible]	[illegible]	[illegible]	21.52	0.17	3.5	<2	1.4	73	41.7	37436	0.7	55	11	0.6	0.4	105.3	0.10	5.51	59.9	119
[illegible]	[illegible]	[illegible]	20.16	0.16	3.4	<2	5.1	67	34.1	35359	0.5	51	11	0.4	0.2	94.5	0.09	3.99	54.5	133
[illegible]	[illegible]	[illegible]	22.38	0.16	2.7	<2	1.0	67	36.3	33967	0.6	52	10	0.5	0.3	93.0	0.09	6.35	53.9	128
[illegible]	[illegible]	[illegible]	28.11	0.14	5.1	<2	NM	19	19.5	7522	1.0	16	7	NM	NM	36.0	0.12	0.99	22.8	67
[illegible]	[illegible]	[illegible]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
[illegible]	[illegible]	[illegible]	40.75	0.12	2.3	<2	NM	40	29.5	18587	0.8	40	9	NM	NM	60.4	0.13	1.86	46.9	99
[illegible]	[illegible]	[illegible]	21.28	0.11	3.3	<2	2.5	75	52.0	38196	1.6	58	13	1.2	0.6	109.0	0.13	3.10	72.8	104

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
			Gravi	WS	RyNA	RyNA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
			%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
			0.01	0.04	0.5	2	0.1	1	0.4	20	0.05	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
871	468169	5466513	16.72	0.16	2.3	<2	1.4	90	29.9	45668	0.5	66	14	0.6	0.6	126.3	0.09	2.41	76.4	135
872	468267	5464429	14.74	0.16	3.0	<2	2.4	81	41.2	41640	0.6	58	14	0.5	0.5	124.0	0.08	2.67	71.9	121
873	468367	5462161	16.89	0.16	4.3	<2	4.8	72	40.3	36028	1.2	55	13	1.9	3.1	110.2	0.09	2.70	59.9	126
874	468467	5461752	16.69	0.15	2.3	<2	0.9	76	39.6	38021	0.5	58	12	0.4	0.9	111.8	0.07	2.20	57.9	130
875	468570	5460530	17.7	0.15	2.9	<2	0.5	80	39.9	40540	0.5	59	13	0.4	0.6	111.3	0.08	1.96	60.9	133
876	468669	5459286	18.65	0.12	4.8	<2	0.5	68	43.1	37392	1.0	54	13	0.8	1.1	105.6	0.09	2.40	64.1	104
877	468767	5458764	19.68	0.14	3.3	<2	1.0	83	37.0	42795	0.5	62	13	0.4	1.0	119.5	0.09	2.00	63.2	141
878	468867	5457734	19.97	0.17	3.6	<2	0.5	85	42.3	44466	0.7	64	14	0.5	0.6	121.0	0.09	2.52	73.1	141
879	468967	5456753	17.19	0.19	4.2	<2	1.0	83	44.1	40609	0.7	63	15	0.7	0.8	140.1	0.10	2.99	78.1	134
880	469067	5455740	19.53	0.23	3.1	<2	NM	85	46.7	43447	0.6	61	14	NM	NM	119.9	0.10	2.86	74.6	129
881	469167	5454740	18.13	0.20	3.3	<2	NM	93	47.5	26837	0.9	46	12	NM	NM	89.2	0.22	2.56	52.2	90
882	469267	5453740	19.09	0.15	2.9	<2	0.5	83	39.6	44207	0.4	60	13	0.2	0.3	117.3	0.09	1.88	75.3	122
883	469367	5452713	17.7	0.19	3.5	<2	0.5	83	45.3	43531	0.8	60	14	0.8	1.1	126.5	0.09	2.89	78.2	119
884	469466	5451714	14.09	0.06	1.1	<2	NM	31	19.1	11817	1.1	21	6	NM	NM	85.0	0.07	14.20	26.2	60
885	469569	5450693	12.2	0.07	0.8	<2	NM	36	25.5	21939	2.0	37	9	NM	NM	102.7	0.09	23.43	42.0	94
886	469665	5449664	24.94	0.15	2.3	<2	NM	39	31.7	26648	1.6	28	9	NM	NM	120.0	0.10	22.27	40.2	92
887	469767	5448714	28.2	0.12	4.9	<2	NM	44	42.1	53316	3.4	37	11	NM	NM	179.2	0.12	39.42	57.9	125
888	469868	5447764	27.13	0.19	4.6	<2	NM	46	47.1	51238	4.2	46	11	NM	NM	187.3	0.16	33.32	63.2	137
889	469967	5446764	23.47	0.10	3.6	<2	NM	47	34.9	26629	2.1	31	9	NM	NM	157.5	0.10	29.76	42.9	101
890	470065	5445764	24.85	0.23	2.9	<2	NM	35	32.9	17081	1.1	25	7	NM	NM	119.2	0.09	19.39	30.9	75
891	470166	5444764	18.28	0.28	2.3	<2	NM	35	30.8	16722	1.4	28	8	NM	NM	111.6	0.10	15.76	33.3	76
892	470266	5443771	9	0.27	3.1	<2	NM	51	34.4	13483	0.9	28	7	NM	NM	94.7	0.12	11.12	34.6	68
893	470366	5442783	23.58	0.28	1.7	<2	NM	34	29.4	13978	0.8	26	7	NM	NM	111.5	0.10	12.58	22.8	62
894	470466	5441784	23.82	0.13	3.1	<2	NM	34	27.4	20676	1.4	23	7	NM	NM	90.1	0.11	4.72	30.3	86
895	470565	5440803	27.27	0.11	2.9	<2	NM	31	27.6	16625	0.9	20	7	NM	NM	83.1	0.13	4.25	24.0	72
1401	468668	5534452	18.87	0.08	2.2	<2	NM	27	18.2	12537	0.6	19	5	NM	NM	70.0	0.08	3.10	18.3	62
1402	468768	5533452	18.91	0.07	1.4	<2	NM	22	15.0	14105	1.0	16	5	NM	NM	58.7	0.07	3.43	26.4	64
1403	468868	5532452	17.17	0.07	1.0	<2	NM	24	21.6	7310	0.7	20	5	NM	NM	67.1	0.09	3.20	11.8	52
1404	468968	5531452	25.21	0.09	3.8	<2	NM	35	25.8	29910	2.0	28	7	NM	NM	103.4	0.13	5.70	42.5	118
1405	469067	5530452	11.40	<0.04	1.0	<2	NM	10	10.5	10036	0.4	13	5	NM	NM	47.0	0.14	1.52	15.0	47
1406	469167	5529452	19.64	0.09	1.8	<2	NM	29	21.8	16292	0.9	19	5	NM	NM	76.4	0.10	2.80	23.0	71
1407	469268	5528452	23.3	0.09	3.7	<2	NM	33	34.4	29084	1.7	30	7	NM	NM	102.0	0.14	4.40	38.3	109
1408	469368	5527452	24.16	0.09	3.8	<2	NM	27	28.5	13646	1.1	21	8	NM	NM	83.0	0.16	2.99	28.2	70
1409	469468	5526452	25.27	0.20	3.7	<2	NM	29	31.8	24599	1.6	25	7	NM	NM	99.1	0.11	3.93	32.3	99
1410	469567	5525452	21.83	0.09	1.8	<2	NM	25	29.4	12986	0.9	21	6	NM	NM	85.8	0.11	3.16	22.4	74
1411	469668	5524452	26.53	0.07	2.2	<2	NM	23	23.4	13408	1.0	22	5	NM	NM	82.4	0.09	3.07	20.4	77
1412	469768	5523452	24.2	0.09	3.1	<2	NM	29	25.6	17042	1.3	18	6	NM	NM	86.3	0.12	5.10	24.5	72
1413	469868	5522452	19.44	0.07	1.0	<2	NM	23	24.5	8296	0.7	19	5	NM	NM	78.4	0.08	3.90	14.7	61
1414	469968	5521452	27.35	0.07	1.1	<2	NM	24	31.1	9053	1.2	28	5	NM	NM	96.9	0.11	5.80	16.1	82
1415	470067	5520452	12.68	0.13	2.0	<2	0.5	79	42.7	41130	0.6	58	14	0.4	0.4	118.3	0.09	2.36	71.3	115
1416	468667	5534452	15.28	0.12	2.8	<2	0.5	82	39.8	42768	0.5	60	14	0.3	0.3	110.4	0.12	2.02	72.8	121
1417	468767	5533452	21.1	0.09	3.9	<2	0.5	89	38.7	51370	0.4	66	15	0.3	0.3	122.7	0.14	1.69	79.7	118
1418	468867	5532452	14.97	0.10	3.5	<2	0.5	84	40.3	43580	0.6	63	14	0.5	0.6	120.6	0.09	2.43	75.6	123
1419	468968	5531452	19.13	0.16	4.8	<2	0.5	72	41.5	35417	0.6	53	21	0.3	0.4	114.4	0.27	2.58	69.4	118
1420	469067	5530452	21.24	0.14	3.6	<2	0.5	64	50.2	32522	0.9	54	12	0.8	0.4	94.6	0.12	3.09	54.2	121
1421	469168	5529452	12.83	0.13	4.7	<2	0.5	75	44.4	40977	0.6	60	14	0.4	0.2	119.1	0.08	2.92	66.0	124

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
1024	487438	5498946	19.84	0.12	3.2	<2	4.6	58	62.8	30147	1.8	52	11	0.6	0.4	92.3	0.08	2.52	53.5	100
1025	488330	5498546	22.78	0.16	3.8	<2	2.5	70	50.2	34636	0.7	57	14	0.7	0.4	99.3	0.13	2.53	54.3	115
1026	485624	5497639	14.39	0.12	4.2	<2	0.5	70	51.6	39238	0.8	59	15	0.4	0.6	111.2	0.09	2.33	60.5	111
1027	485466	5494754	20.9	0.14	2.1	<2	0.5	61	46.0	31289	0.5	49	11	0.7	0.8	93.4	0.08	1.88	47.0	112
1028	483419	5499057	13.69	0.12	4.9	<2	1.5	78	49.4	42534	0.8	60	14	1.2	2.3	124.0	0.11	2.80	69.2	118
1029	482229	5500737	11.41	0.11	4.1	<2	0.5	78	49.1	42949	0.9	60	15	0.6	0.3	122.0	0.11	2.59	72.3	116
1031	480675	5504426	12.13	0.11	3.2	<2	2.7	75	40.9	40436	0.8	54	13	0.4	0.1	114.1	0.10	2.89	74.1	114
1032	482332	5507167	12.03	0.11	2.4	<2	0.5	81	40.5	42093	0.6	58	14	0.2	0.1	116.5	0.12	2.88	77.0	119
1033	481997	5509082	8.91	0.10	4.6	<2	0.5	72	52.6	39106	1.1	59	14	0.6	0.7	108.2	0.11	1.79	64.0	105
1034	484183	5508508	10.84	0.10	3.2	<2	0.5	65	36.1	34523	0.6	49	13	0.5	0.7	102.3	0.07	2.72	58.2	100
1035	488050	5505526	11.27	0.11	3.4	<2	0.5	66	38.3	35879	0.7	49	13	1.0	1.0	108.0	0.09	2.65	60.9	103
1036	486876	5509752	9.48	0.10	2.3	<2	NM	58	30.9	29613	0.5	42	11	NM	NM	89.2	0.06	2.05	48.3	85
		Median	41.9	0.11	2.70	3.00	1.40	29.13	32.92	15562	1.17	26.00	7.10	0.70	0.55	82.84	0.11	3.75	33.00	74.00
		Mean	40.00	0.19	3.07	4.00	2.11	33.50	35.76	18925	1.38	29.44	7.91	0.95	0.71	82.45	0.12	7.74	35.83	81.25
		Standard Deviation	16.33	2.04	3.70	2.41	2.48	17.96	16.91	11862	0.90	14.84	3.98	0.86	1.05	33.41	0.07	11.04	17.13	40.79
		Minimum	4.09	0.04	0.50	2.00	0.50	5.79	3.67	1338	0.22	4.00	2.00	0.05	0.05	10.43	0.03	0.27	5.40	14.00
		Maximum	77.39	60.00	105.00	8.00	20.20	110.30	136.29	135000	7.87	150.00	39.90	6.10	11.90	324.67	1.04	90.00	180.00	730.00
		Count	877	877	875	875	147	877	877	877	872	877	872	147	147	872	877	872	877	877

Sample	Easting	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs	Sb	U	V	Zn
	Method	---------->	Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	MS	MS	MS	OES	OES
	Units	---------->	%	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
	Det Limit	---------->	0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4
1024	487438	5498946	19.84	0.12	3.2	<2	4.6	58	62.8	30147	1.8	52	11	0.6	0.4	92.3	0.08	2.52	53.5	100
1025	488330	5498546	22.78	0.16	3.8	<2	2.5	70	50.2	34636	0.7	57	14	0.7	0.4	99.3	0.13	2.53	54.3	115
1026	485624	5497639	14.39	0.12	4.2	<2	0.5	70	51.6	39238	0.8	59	15	0.4	0.6	111.2	0.09	2.33	60.5	111
1027	485466	5494754	20.9	0.14	2.1	<2	0.5	61	46.0	31289	0.5	49	11	0.7	0.8	93.4	0.08	1.88	47.0	112
1028	**483419**	**5499057**	**13.69**	**0.12**	**4.9**	**<2**	**1.5**	**78**	**49.4**	**42534**	**0.8**	**60**	**14**	**1.2**	**2.3**	**124.0**	**0.11**	**2.80**	**69.2**	**118**
1029	482229	5500737	11.41	0.11	4.1	<2	0.5	78	49.1	42949	0.9	60	15	0.6	0.3	122.0	0.11	2.59	72.3	116
1031	480675	5504426	12.13	0.11	3.2	<2	2.7	75	40.9	40436	0.8	54	13	0.4	0.1	114.1	0.10	2.89	74.1	114
1032	482332	5507167	12.03	0.11	2.4	<2	0.5	81	40.5	42093	0.6	58	14	0.2	0.1	116.5	0.12	2.88	77.0	119
1033	481997	5509082	8.91	0.10	4.6	<2	0.5	72	52.6	39106	1.1	59	14	0.6	0.7	108.2	0.11	1.79	64.0	105
1034	**484183**	**5508508**	**10.84**	**0.10**	**3.2**	**<2**	**0.5**	**65**	**36.1**	**34523**	**0.6**	**49**	**13**	**0.5**	**0.7**	**102.3**	**0.07**	**2.72**	**58.2**	**100**
1035	488050	5505526	11.27	0.11	3.4	<2	0.5	66	38.3	35879	0.7	49	13	1.0	1.0	108.0	0.09	2.65	60.9	103
1036	486876	5509752	9.48	0.10	2.3	<2	NM	58	30.9	29613	0.5	42	11	NM	NM	89.2	0.06	2.05	48.3	85
	Median		41.9	0.11	2.70	3.00	1.40	29.13	32.92	15562	1.17	26.00	7.10	0.70	0.55	82.84	0.11	3.75	33.00	74.00
	Mean		40.00	0.19	3.07	4.00	2.11	33.50	35.76	18925	1.38	29.44	7.91	0.95	0.71	82.45	0.12	7.74	35.83	81.25
	Standard Deviation		16.33	2.04	3.70	2.41	2.48	17.96	16.91	11862	0.90	14.84	3.98	0.86	1.05	33.41	0.07	11.04	17.13	40.79
	Minimum		4.09	0.04	0.50	2.00	0.50	5.79	3.67	1338	0.22	4.00	2.00	0.05	0.05	10.43	0.03	0.27	5.40	14.00
	Maximum		77.39	60.00	105.00	8.00	20.20	110.30	136.29	135000	7.87	150.00	39.90	6.10	11.90	324.67	1.04	90.00	180.00	730.00
	Count		877	877	875	875	147	877	877	877	872	877	872	147	147	872	877	872	877	877

Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 023	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
		MASS			
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 90**	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

ISSN 0826-9580
ISBN 0-7794-7760-X

MAP NOT FILMED

CARTE NON REPRODUITE

Micromedia
ProQuest

20 Victoria Street
Toronto, Ontario M5C 2N8
Tel.: (416) 362-5211
Toll Free: 1-800-387-2689
Fax: (416) 362-6161
Email: info@micromedia.on.ca